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PHYSICAL SCIENCE

COMPARED WITH THE SECOND BEAST

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FALSE PROPHET OF THE REVELATION.

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"And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men."—REV. xiii. 13.

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PREFACE.

An inquiry like the present may be compared to a voyage of discovery on the ocean of Revelation in search of a new, namely, the *modern* world. The author resembles a man in the ship who signals land in sight. The larger it grows and the longer he looks, the more is he convinced that what he sees is solid earth. It may possibly turn out to be but a bank of cloud. But though he may be mistaken in the object, he cannot be mistaken in his duty. He is bound to make known his observation if he care for his own safety and for that of those who have the same hopes and who are exposed to the same perils as himself.

CONTENTS.

CHAP.		PAGE
I.	Introduction	1
II.	The Rising of the Beast	10
III.	The Horns of the Beast	19
IV.	The Beast's mode of speech	24
V.	Fire from Heaven	27
VI.	Miracles	31
VII.	The great Wonder of the Beast	43
VIII.	Effect of the Miracles	46
IX.	Infidelity and Faith	51
X.	The Two Beasts and the Image	63
XI.	The Mark	66
XII.	The Beast and False Prophet	75
XIII.	The Number	81
XIV.	Conclusion	86

APPENDIX.

NOTE		PAGE
A.	The Rising of the Beasts	91
B.	The Two Horns	92
C.	Extent of our Knowledge	97
D.	Franklin's Great Wonder and its Effect	100
E.	Electricity	101
F.	The Value of Wonders	106
G.	Science and Revealed Religion	109
H.	Political Economy	111
I.	Antichrist	114
Z.	Rationalism, and the Relation in which it stands to Anti-Christ. An Examination of a Rationalistic Difficulty	116

PHYSICAL SCIENCE,

&c.

CHAPTER I.

INTRODUCTION.

"(11) And I beheld another beast coming up out of the earth; and he had two horns like a lamb, and he spake as a dragon.

"(12) And he exerciseth all the power of the first beast before him, and causeth the earth and them which dwell therein to worship the first beast, whose deadly wound was healed.

"(13) And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men,

"(14) And deceiveth them that dwell on the earth by the means of those miracles which he had power to do in the sight of the beast; saying to them that dwell on the earth, that they should make an image to the beast, which had the wound by a sword, and did live.

"(15) And he had power to give life unto the image of the beast, that the image of the beast should both speak, and cause that as many as would not worship the image of the beast should be killed.

"(16) And he causeth all, both small and great, rich and poor, free and bond, to receive a mark in their right hand, or in their foreheads:

"(17) And that no man might buy or sell, save he that had the mark, or the name of the beast, or the number of his name.

"(18) Here is wisdom. Let him that hath understanding count the number of the beast: for it is the number of a man; and his number is Six hundred threescore and six."—*Rev.* xiii. 11—18.

The chapter from which this extract is made contains the account of two beasts, which St. John saw rising up, out of the sea, and out of the earth.

The second of the two is understood to be the False Prophet mentioned in other parts of the Revelation; and he is almost universally believed to be a Power, and not merely one man. For many years the vision was thought to represent Papal Rome. The beast from the sea the Empire, and that from the earth the Hierarchy of the Papacy.

However, even among those most firmly persuaded of the general truth of this interpretation, there has always been considerable dissatisfaction

with the explanation it gives of the second beast; and different theories have from time to time been put forth concerning this figure; one, for example, that it represents Infidelity.

Some who believe the first beast to be in the world, think the second has not yet risen upon us; but it will not be necessary to notice speculations on the second which make him future, because in that case he is also unknown. I shall therefore confine what few remarks I have to make upon other theories to the one first mentioned, namely, that which makes the False Prophet to be the Roman Hierarchy, since it is the one which has been most generally received.

But before in any way examining the subject it may be well to state clearly the nature of the views which I am myself bringing forward. Let it be at once understood, then, that from my point of view the question about to be considered is simply a practical one. It is not with the effect necessarily produced on the human mind by a knowledge of the laws of nature that we have to do; but with the effect actually produced on Christendom, and so on Christianity, by the rising up of this knowledge as a *Power* among us. And that this is the true light in which to examine the subject will, I think, at once be admitted when it is remembered how much those who have no scientific knowledge are influenced by the conclusions of scientific men. The whole question, then, is one of facts, not of opinions. Does Physical Science resemble a cer-

tain Power which was to arise in the world, or not?

St. John says, "And I beheld another beast coming up out of the earth; and he had two horns like a lamb, and he spake as a dragon."

This beast, then, is "*another*;" and he was seen "coming up out of the *earth*," while the first rose up out of the *sea*. It is clear, therefore, whatever earth and sea may mean, that the two beasts are independent of each other; and come from different places.

They are, too, unlike each other in appearance; for the first is described as having seven heads and ten horns (as the dragon also had); while no more is said of the appearance of the second than this, "he had two horns like a lamb."

There is, again, a difference between them in manner of speaking; for the first had a mouth given unto him "speaking great things and blasphemies," while of the second it is said, "and he spake as a dragon;" which, I suppose, means deceitfully, or as the dragon spake, "that old serpent, called the Devil, and Satan, which deceiveth the whole world[1]."

Now, at Rome temporal and spiritual powers are united in the same persons. It seems unlikely, therefore, that the Roman Hierarchy would be spoken of as *another* beast.

Again; in what way does the power of this

[1] Rev. xii. 9.

Hierarchy resemble the two horns of a lamb? If the two horns of the beast be, as Bishop Newton says, the body of the clergy regular and secular, what is there in a lamb, or in the Lamb of God, which they resemble? And if the Roman Hierarchy be the second beast, surely it is this second beast which speaks great things and blasphemies? since, if the Pope blaspheme, it is as High Priest that he does so.

"(13) And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men,

"(14) And deceiveth them that dwell on the earth by the means of those miracles which he had power to do in the sight of the beast[1]."

The "great wonders" have been considered by those who see in the second beast the Roman Hierarchy, to be its sham miracles; and the fire from heaven, its curses and excommunications. Yet the beast is said to deceive "by the means of those miracles which he *had power to do*," and not by the pretence of those for the working of which he had *not* power. Again; he does not *send* down the fire from heaven, but he *maketh it come* down. In this, I see nothing to lead us to suppose that the fire represents a curse. Bishop Newton says of the beast, "He pretends, like other false prophets, (verse 13,) to show *great signs and wonders*, and even to call for *fire from heaven*, as Elias did."

[1] Rev. xiii. 13, 14.

Now, Elias once called for fire to prove that the Lord is God; and when it fell, it "consumed the burnt sacrifice, and the wood, and the stones, and the dust, and licked up the water that was in the trench [3]." At other times he called for it to destroy *men* who were sent against him [4]. But in this last case, the two witnesses mentioned in Rev. xi. are more like Elias than the beast is; for (5) "If any man will hurt them, fire proceedeth out of their mouth, and devoureth their enemies: and if any man will hurt them, he must in this manner be killed." So that the beast's great wonder resembles far more that other miracle on Mount Carmel, when, in answer to Elijah's prayer, "the fire of the Lord fell," and it was proved to Israel that the Lord is God.

Now, *Physical Science* has really done great wonders; so that it has *literally made fire come down from heaven on the earth in the sight of men;* has deceived men, and is deceiving them, by the means of those miracles which it has power to do; since they are the proofs of its truth, and are thus the foundation of that authority, which has made it the *rival* of Revelation.

When the false prophet come, therefore, will he do greater wonders than this Science has done? Or can he more literally fulfil this prophecy?

For, now that we have seen real wonders, we naturally feel it to be very unlikely that pretended

[3] 1 Kings xviii. 38. [4] 2 Kings i. 10. 12.

miracles should be those predicted; since that would seem to make the less of more importance than the greater; the sham of more consequence than the real. Had Science never opposed Revelation, this objection would not perhaps have applied, but it has done so.

Again; as the false prophet is described under the figure of a beast, he is, in all probability, a *Power*, and not a man. Now, what Power has ever done "great wonders," even including the particular wonder mentioned, except Science? And how can any Power arise doing greater wonders, unless they be supernatural and superhuman miracles? The question is, have we reason to believe, from prophecy, that such a Power will arise and eclipse Science? But should it arise, it cannot bring fire from heaven more really and completely than Science has done before it.

My theory rests on this foundation of fact. It is my object now to show the agreement between Science and St. John's description of the second beast, so far as I am able to see a resemblance; for I must admit that I cannot carry the comparison out fully; yet this may not be at present possible; while the literal fulfilment of that part of the prophecy which seems to be given as a key to the whole account of the false prophet ("*so that* he maketh fire come down from heaven"), together with the use we now see made of Science against Revelation, satisfies me that this view of the subject is worthy of attention.

Sir Isaac Newton thought that the prophecies of Daniel and the Revelation of St. John, together make but one complete prophecy, which was not intended to be fully understood till the last age of the world. But he also believed that the great successes of interpreters in the age preceding his own, showed that the last age was approaching, since there was scarcely one of note who had not made *some discovery* worth knowing. And this he looked upon as a sign that God was about opening these mysteries.

Now, it is written in Daniel, "But thou, O Daniel, shut up the words, and seal the book, even to the time of the end: many shall run to and fro, and knowledge shall be increased[5]."

This has been generally understood to mean, that towards the time of the end, great interest and anxiety would be felt in the prophecy, and that knowledge of *it* would be increased. But a more literal fulfilment of the prediction (whether that intended or not) has been pointed out, and is much too striking to be passed over from my view of the subject, viz. the running to and fro which the invention of the steam-engine has caused; and the increase of knowledge, both in amount and in its wonderful diffusion, by means of the printing-press and steam. These are two of the greatest, and most peculiar "signs" of our time. I think, then, that Sir Isaac Newton's idea is confirmed, and

[5] Dan. xii. 4.

that our own time is stamped by these marks as "the time of the end."

Archdeacon Wordsworth, in his work on Babylon, argues:—That the Church is authorized to look for a solution of her difficulties to the prophetic Word of God.—That when any great religious controversy exercises a lasting and extensive influence over Christians, we shall probably find a solution of the question in the prophetical writings of the New Testament. That as there is but one prophetical book in the volume of the New Testament, viz. the Revelation, we shall probably find the solution required in the Revelation, especially as it is a prophetical history of the Church, stretching to the end of the world.

Again; that as heathen Rome doing heathen work was no mystery, it did not require the light of prophecy to be thrown upon it; but that, as Papal Rome was Christian, and yet was "drunk with the blood of the martyrs of Jesus," there was need of prophecy to explain the mystery, and to be a guide to Christians.

I think these arguments apply with equal force to the scientific difficulties of the present age.

The new Tree of Knowledge is good for food, pleasant to the eyes, and a tree to be desired to make one wise. Men have freely plucked and eaten of its fruit. What is the consequence? They have become almost as gods in the power they have obtained over nature, and in the knowledge of nature which they now have, compared

with that which they had in former times. But so far as Christianity is concerned, the newly-acquired wisdom has proved an enemy; and infidelity has been openly avowed, upon the strength of the knowledge which Science has given us. Therefore, though it is not the persecution of Christian by Christian which now troubles us, the case is one of equal subtlety and difficulty; and we may, I think, equally expect to find the light of prophecy thrown upon it.

CHAPTER II.

THE RISING OF THE BEAST.

"And I beheld another beast coming up out of the earth."—REV. xiii. 11.

VARIOUS interpretations have been given of the two figures, sea and earth, out of which the two beasts rose[1]. None of those I have seen seem to me to be altogether satisfactory. However, I am not aware that any explanation of the figure "the earth" can be given, on the supposition that the second beast represents the Roman Hierarchy, which will not apply to it with equal force on the supposition that this beast represents Science.

Physical Science is, and must ever remain, "of the earth earthy," and in two ways, it seems to me, may be looked upon as "coming up out of the earth:" first, as something of human origin; and secondly, as a knowledge of nature obtained by

[1] See Appendix A.

experiments and inductions, the subject of which is exclusively *matter*[2]

Now, Physical Science is modern. Our present wonder-working knowledge is not (as some may imagine) the accumulation of ages, but the rapid growth of a few years. Whatever may have been the cause, till a comparatively short time back, for as many thousand years as the world is old, men remained ignorant of those secret powers and laws of nature, whose late discovery has made modern civilization different *in kind* from all that went before it. Were it not so, it would be difficult to believe that the beast St. John saw coming up out of the earth could be Science; since the difference between our present knowledge and that of his own time would be merely a difference in degree. But till the rise of Physical Science, so far as an understanding of nature is concerned, men were working in a wrong direction; they were groping in the dark; they had not so much as found the *key* to nature. It is true that some of the most useful discoveries (such as that of gunpowder, for instance) were made in the ages of ignorance, and even now may be accidentally made. But the difference between our own knowledge and the knowledge of those past times is shown in this; that *then* each invention stood alone and unconnected with others; it was not a link in a

[2] The Lamb Himself came from the earth; first, when He was made flesh and was born of a woman; secondly, and more literally, when He rose from the dead.

chain, but separate and independent. *Now*, on the contrary, every thing is studied in its connexion with the rest of nature, and, to a certain extent, this connexion is understood; so that no discovery is complete in itself, but invariably leads to others.

However, for the benefit of those who may not know the true relation in which modern science stands to ancient knowledge, I here give some extracts from Sir I. F. W. Herschel's "Preliminary Discourse on the Study of Natural Philosophy;" to which book I must refer the reader, as I can merely, in this place, quote enough from it to justify me in speaking of Physical Science as sufficiently new to the world to be compared with the second beast; which St. John saw, in the far off future, *coming up* out of the earth.

"Of the state of Physical Science in general, previous to the age of Galileo and Bacon." Part II. chap. 3.

"(96) It is to our immortal countryman Bacon that we owe the broad announcement of this grand and fertile principle; and the development of the idea, that the whole of Natural Philosophy consists entirely of a series of inductive generalizations, commencing with the most circumstantially stated particulars, and carried up to universal laws, or axioms, which comprehend in their statements every subordinate degree of generality, and of a corresponding series of inverted reasoning from generals to particulars, by which these axioms are

traced back into their remotest consequences, and all particular propositions deduced from them; as well those by whose immediate consideration we rose to their discovery, as those of which we had no previous knowledge. In the course of this descent to particulars, we must of necessity encounter all those facts on which the arts and works that tend to the accommodation of human life depend, and acquire thereby the command of an unlimited practice, and a disposal of the powers of nature co-extensive with those powers themselves. A noble promise, indeed, and one which ought, surely, to animate us to the highest exertion of our faculties; especially since we have already such convincing proof that it is neither vain nor rash, but, on the contrary, has been, and continues to be, fulfilled, with a promptness and liberality which even its illustrious author in his most sanguine mood would have hardly ventured to anticipate.

"(97) Previous to the publication of the Novum Organum of Bacon, Natural Philosophy, in any legitimate and extensive sense of the word, could hardly be said to exist. . . . .

"(102) In the early ages of the Church, the writings of Aristotle were condemned, as allowing too much to reason and sense; and even so late as the twelfth century they were sought out and burned, and their readers excommunicated. By degrees, however, the extreme injustice of this impeachment of their character was acknowledged:

they became the favourite study of the Schoolmen, and furnished the keenest weapons of their controversy, being appealed to in all disputes as of sovereign authority; so that the slightest dissent from any opinion of the 'great master,' however absurd or unintelligible, was at once drowned by clamour, or silenced by the still more effectual argument of bitter persecution. If the logic of that gloomy period could be justly described as 'the art of talking unintelligibly on matters of which we are ignorant,' its physics might, with equal truth, be summed up in a deliberate preference of ignorance to knowledge, in matters of every day's experience and use.

"(103) In 'this opaque of nature and of soul,' the perverse activity of the alchemists from time to time struck out a doubtful spark; and our illustrious countryman, Roger Bacon, shone out at the obscurest moment, like an early star predicting dawn. It was not, however, till the sixteenth century that the light of nature began to break forth with a regular and progressive increase. . . .

"(104) But, as the decisive mark of a great commencing change in the direction of the human faculties, astronomy, the only science in which the ancients had made any real progress, and ascended to any thing like large and general conceptions, began once more to be studied in the best spirit of a candid philosophy; and the Copernican or Pythagorean system arose or revived, and rapidly gained advocates. Galileo at length appeared, and

openly attacked and refuted the Aristotelian dogmas respecting motion, by direct appeal to the evidence of sense, and by experiments of the most convincing kind. . . . .

"(105) By the discoveries of Copernicus, Kepler, and Galileo, the errors of the Aristotelian philosophy were effectually overturned on a plain appeal to the facts of nature; but it remained to show on broad and general principles, how and why Aristotle was in the wrong; to set in evidence the peculiar weakness of his method of philosophizing, and to substitute in its place a stronger and better. This important task was executed by Francis Bacon, Lord Verulam, who will, therefore, justly be looked upon in all future ages as the great reformer of philosophy, though his own actual contributions to the stock of physical truths were small, and his ideas of particular points strongly tinctured with mistakes and errors, which were the fault rather of the general want of physical information of the age than of any narrowness of view on his own part; and of this he was fully aware. It has been attempted by some to lessen the merit of this great achievement, by showing that the inductive method had been practised in many instances, both ancient and modern, by the mere instinct of mankind; but it is not the introduction of inductive reasoning, as a new and hitherto untried process, which characterizes the Baconian philosophy, but his keen perception, and his broad and spirit-stirring, almost

enthusiastic, announcement of its paramount importance, as the Alpha and Omega of science, as the grand and only chain for the linking together of physical truths, and the eventual key to every discovery and every application. Those who would deny him his just glory on such grounds would refuse to Jenner or to Howard their civic crowns, because a few farmers in a remote province had, time out of mind, been acquainted with vaccination, or philanthropists, in all ages, had occasionally visited the prisoner in his dungeon.

"(106) An immense impulse was now given to science, and it seemed as if the genius of mankind, long pent up, had at length rushed eagerly upon nature, and commenced, with one accord, the great work of turning up her hitherto unbroken soil, and exposing the treasures so long concealed. A general sense now prevailed of the poverty and insufficiency of existing knowledge in *matters of fact;* and, as information flowed fast in, an era of excitement and wonder commenced, to which the annals of mankind had furnished nothing similar. It seemed, too, as if nature herself seconded the impulse; and, while she supplied new and extraordinary aids to those senses which were henceforth to be exercised in her investigation,—while the telescope and the microscope laid open *the infinite* in both directions,—as if to call attention to her wonders, and signalize the epoch, she displayed the rarest, the most splendid and mysterious of all astronomical phenomena, the appearance and sub-

sequent total extinction of a new and brilliant fixed star twice within the life-time of Galileo himself.

"(107) The immediate followers of Bacon and Galileo ransacked all nature for new and surprising facts, with something of that craving for the marvellous, which might be regarded as a remnant of the age of alchemy and natural magic, but which, under proper regulation, is a most powerful and useful stimulus to experimental inquiry. Boyle, in particular, seemed animated by an enthusiasm of ardour, which hurried him from subject to subject, and from experiment to experiment, without a moment's intermission, and with a sort of undistinguishing appetite; while Hooke (the great contemporary, and almost the worthy rival of Newton) carried a keener eye of scrutinising reason into a range of research even yet more extensive. As facts multiplied, leading phenomena became prominent, laws began to emerge, and generalizations to commence; and so rapid was the career of discovery, so signal the triumph of the inductive philosophy, that a single generation and the efforts of a single mind sufficed for the establishment of the system of the universe, on a basis never after to be shaken."

CHAPTER III.

THE HORNS OF THE BEAST.

"And he had two horns like a lamb."—Rev. xiii. 11.

Horns are universally allowed to be the symbols of strength or power.

Now, it does not seem probable that the beast is described as having two horns like a lamb, merely to show his resemblance to something harmless; or even to show his resemblance to the Lamb of God, in a *general* manner. If that were all that was intended, it seems to me more likely that St. John would have said, "I beheld a beast like a lamb," without mentioning the horns; for in this manner he writes of the first, "And the beast which I saw was like unto a leopard," &c.[8], while it is remarkable that of the general appearance of the second, he says nothing at all. Therefore it seems that the resemblance between the beast and a lamb is confined to the horns, or *power* of both.

[8] Rev. xiii. 2.

Again; the peculiarity is not simply in this beast having horns; for others seen by the prophets had them, though not in a natural manner, as perhaps may be the case with this one. Thus the he goat seen by Daniel "had a notable horn between his eyes," and when this "great horn" was broken, "for it came up four notable ones toward the four winds of heaven [9];"—and the first beast St. John saw had ten horns. Therefore I think the peculiarity in the case of the second beast lies in the number of his horns, and in their resemblance both in number and in nature to two others, called the horns of a lamb.

But then; it is not peculiar to *lambs* to have *two* horns. Most horned animals have two. Therefore I think that the lamb is the Lamb of God; and this (for other reasons also) is generally understood to be what is meant [1].

[9] Dan. viii. 5. 8.

[1] It is true the Lamb was seen by St. John with *seven* horns (Rev. v. 6), but He had also seven eyes, "which are the seven Spirits of God sent forth into all the earth." Moreover, this Lamb was seen in heaven, "in the midst of the throne," and, "as it had been slain." Now, after our Lord's resurrection, He said to His disciples,—"All power is given unto Me in heaven and in earth." (Matt. xxviii. 18.) I think, then, that the seven horns seen on the Lamb in heaven represent this fulness of power; for it must be remembered, that the number seven is used throughout the Bible mystically, as the number of perfection. Thus the creation, which is described as lasting six days, is followed by a seventh day's rest, without mention of which the account of it would be incomplete; and the Spirit of God Himself is spoken of as the *seven* Spirits of God.

Again: the great dragon has seven heads; and the beast to

Since, then, we know who is the Lamb, but do not know who, or what is the beast, it seems that we must first understand the horns of the Lamb before we can recognize those of the beast which resemble them.

Now, as horns are the symbols of strength or power, it seems probable that the two horns of the Lamb of God may mean His two natures, divine

whom he gives his power and his seat and great authority has also seven heads. These, we are told, are seven mountains on which the great city, the woman Babylon, sits. So far, then, as Babylon is the literal city of Rome, the seven mountains are the seven literal hills on which Rome is built. But, so far as the great whore is something more than a mere *literal city*, so far, perhaps, the meaning of these *mountains*, being *seven*, may be extended to the *perfect physical or worldly strength* on which the woman sits, and to which she trusts, saying in her heart—"I sit a queen, and am no widow, and shall see no sorrow."

The way in which the number seven runs through the whole book of the Revelation is most remarkable.

The Lamb has seven horns, and seven eyes, which are the seven Spirits of God.

There are the seven golden candlesticks which are the seven churches; and the seven stars in the right hand of the Son of Man which are the angels of the seven churches.

The book with seven seals.

The seven trumpets which are sounded by seven angels at the opening of the seventh seal.

(Compare with this the siege of Jericho, where seven priests, with seven trumpets, marched round the city seven days, once on each of the first six days, and seven times on the seventh.)

The seven vials which are poured out by seven angels having the seven last plagues, at the sounding of the seventh trumpet.

Then there are seven thunders; the dragon has seven heads; the beast from the sea seven heads, which are seven mountains—"and there are seven kings."

and human, since His power as Saviour, the Lamb slain, lies in the union of these two.

For "the Word was made flesh, and dwelt among us [2]," and was thus, Son of God and Son of man, the Christ, the Lamb of God.

He wrought miracles by His own power, which as man alone He could not have done.

"Yet learned He obedience by the things which He suffered [3];" and He is a High Priest who can sympathize with us, because He was tempted as we are. Thus He is a Saviour, not by His will merely, but by coming down from heaven, taking our nature, and practically living the life of man, being tempted, suffering, and obeying the law.

"(8) And being found in fashion as a man, He humbled Himself, and became obedient unto death, even the death of the cross.

"(9) Wherefore God also hath highly exalted Him, and given Him a name which is above every name:

"(10) That at the name of Jesus every knee should bow, of things in heaven, and things in earth, and things under the earth;

"(11) And that every tongue should confess that Jesus Christ is Lord, to the glory of God the Father [4]."

The strength of Physical Science also lies in a double nature: and resembles the strength of the Lamb thus:—

[2] John i. 14. [3] Heb. v. 8; iv. 15; ii. 18.
[4] Phil. ii.

The higher nature of Science, or that which answers to the Divine Word (Logos), is Reason. But it must be united with Experience (which includes experiment), or we have no physical science. Experience and experiment without it merely give knowledge of facts; but when to this knowledge is added the power of reason, generalizations take place, laws are discovered, the knowledge of fact becomes the knowledge of truth; and a wonder-working power, or Science, appears; a power which is now in the world, and which, like the beast, has done such "great wonders," that it has even made fire come down from heaven on the earth in the sight of men.

Thus in a union of two natures, experiment and induction, (sense and reason,) lies the strength or power of Science; and the resemblance of these two in their union, is not, I think, a fanciful resemblance to that united action of two natures which gives strength or power to the Lamb[5].

[5] See Appendix B.

CHAPTER IV.

THE BEAST'S MODE OF SPEECH.

"And he spake as a dragon."—REV. xiii. 11.

As by "two horns like a lamb" is understood a resemblance to the power of the Lamb of God, so, by the beast speaking as a dragon is understood that his manner of speaking is like the dragon's, or the devil's, "that old serpent," who is the great enemy of the Lamb.

And, indeed, this opposition of lamb and dragon seems to leave no room for another meaning to be put on the passage, since the natural contrast to a lamb is, not a dragon, but a wolf; a contrast, too, actually used by our Lord in His description of false prophets[6].

I consider it a settled point, then, that by "a dragon" is meant the devil or the serpent. And, as to understand the two horns of the beast, which are like those of a lamb, it is necessary first to

[6] Matt. vii. 15.

know the lamb's horns, so to understand the manner of speaking which is like a dragon's, it is also necessary first to know how the dragon speaks.

The dragon's manner of speaking we find in the very earliest account of him, and of his dealings with man.

"(1) Now the serpent was more subtil than any beast of the field which the Lord God had made. And he said unto the woman, Yea, hath God said, Ye shall not eat of every tree of the garden?

"(2) And the woman said unto the serpent, We may eat of the fruit of the trees of the garden:

"(3) But of the fruit of the tree which is in the midst of the garden, God hath said, Ye shall not eat of it, neither shall ye touch it, lest ye die.

"(4) And the serpent said unto the woman, Ye shall not surely die:

"(5) For God doth know that in the day ye eat thereof, then your eyes shall be opened, and ye shall be as gods, knowing good and evil[7]."

Since, then, the beast speaks as a dragon, we may not only expect him to deceive, but to deceive in this manner—by contradicting the known Word of God; by teaching men to rely on themselves, or on him, and not on God; and by putting knowledge of man's own finding out above faith in the revelation of God.

How far the effects produced by Science answer to this description of the dragon's manner of speaking, every one knows.

[7] Gen. iii. 1—5.

Rationalism is the result of Science. However true it may be that Science, being good in itself, *ought not* to lead men away from Revelation; the fact is that it has done so. And this at once settles the question of the *possibility* of its becoming a false prophet.

Neither is Rationalism like common unbelief. It must either be true, and the best thing in the world; or false, and the very worst; since it is, and must be, the *last* form of infidelity, being built by *reason* on the foundation of *knowledge;* so that there can be no appeal from it but to that Revelation *above* which it exalts itself.

Thus there is in Rationalism, not only an appearance of a new step being taken in the world's history, but one which brings us more within sight of the end, as it were, than any made before it. A step taken deliberately in the midst of light and liberty. Rationalism begins too in the most subtle and plausible manner imaginable; finding fault, not with the Bible itself so much, as with a certain (the Christian) "*interpretation*" of it. Yet, should it succeed in planting its own "*interpretation*," we should see an "abomination that maketh desolate standing in the holy place."

CHAPTER V.

FIRE FROM HEAVEN.

"And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men."—REV. xiii. 13.

THOUGH the history of Dr. Franklin and his electrical kite is well known, it may be proper, in this place, to give a slight sketch of it, for in it we see, according to my views, the fulfilment of prophecy.

The following account is taken from a little book on Electricity, written by the Rev. Edwin Sidney, for the Religious Tract Society [8].

"One of the most striking discoveries of the last century, was the identity of atmospherical electricity with that which has been described in the last three chapters. It is to Dr. Franklin that we are indebted for our introduction to a knowledge of this fact, although, a short time previous to his realization of his theory, a Frenchman, named Dalibard, said to have taken the hint from

[8] "Electricity; its Phenomena, Laws, and Results," chap. iv.

what Franklin had predicted, succeeded in drawvivid electric sparks from the atmosphere at Martly-la-Ville. Franklin, in total ignorance of this, pursued his researches in America, during the year 1752, with perfect success. Other electricians, as Hawksbee, Wall, and Nollet, had before suspected what he now proved. He had for some time awaited the completion of the spire of a church erecting at Philadelphia, as an elevation whence he might bring down the electricity of a passing thunder-cloud. But his patience would allow him to delay no longer, so he went out from the town, accompanied only by his son, fearing ridicule, to fly his electrical kite. It was of simple construction, consisting of a silk handkerchief spread across light strips of cedar for the body, to which he appended a tail, a loop, and a string. A sharp-pointed wire projected from the upright stick of the cross, and at the end of the twine next the hand was a silk riband, with a key hanging from the junction of the twine and silk. To keep himself and the silk dry, he stood within the door of a shed, taking care not to let the twine touch the wood. No indications of electricity from a passing cloud were perceptible till it began to rain, when the loose filaments of the string, which being wetted became a better conductor, diverged, repelling each other. This was enough to satisfy him of the presence of electrical energy, and on applying his knuckle to the key a spark was elicited. When the twine was soaked

with the shower, the electricity was abundant, so that he was enabled to charge a jar, inflame spirits, and, in fact, to perform the usual experiments of frictional excitement. On other trials, he found the clouds sometimes positively, and sometimes negatively electrified, and thus became satisfied of the identity of the electricity of lightning with that of his machines. One important result of these researches was his celebrated invention of lightning conductors[9].

"Franklin's discoveries soon attracted the attention of the philosophers of Europe. One of them, Professor Richman, of St. Petersburg, fell a victim to the pursuit of similar inquiries. He erected an apparatus, which consisted of a Leyden jar, communicating with an iron rod, rising about five feet from the roof of his house. To it was attached a simple electrometer, formed of a linen thread, suspending half a grain of lead, which moved on the face of a divided quadrant. He obtained, several times, from this adjustment, flashes, explosions, and shocks. At length, on the 6th of August, 1753, he left his house to attend a sitting of the Academy of Sciences, but returned on the coming on of a violent thunderstorm, accompanied by his engineer, Mr. Solokow. He leaned down to observe the indications of his electrometer, with his head about a foot from the iron rod. Instantly there shot forth a huge globe

[9] Thus every lightning conductor becomes a monument to this "great wonder."

of bluish white fire, which, with a report as loud as a pistol, laid him prostrate on a chest, where poor Madame Richman, coming suddenly to the room, found him dead. The effects on the apartment indicated great violence, and the tracery of the electrical course on the body of the deceased was singularly curious."

There are other interesting accounts of experiments in the same chapter of Mr. Sidney's book, but I think it can hardly be necessary to quote more. No heaping up accounts of experiments, however successful, will increase the force of the fact here shown, that *Science has literally made fire come down from heaven on the earth in the sight of men.* The quantity that was afterwards obtained may be much greater than that first brought down by Franklin, but when the spark snapped at *his* knuckle, the miracle was wrought, and as completely wrought as when Richman fell dead by the side of his own apparatus.

CHAPTER VI.

MIRACLES.

It may be said, that though what has just been described was certainly a "great wonder," it cannot properly be called a miracle; and further, that although Science has done many wonderful things, it has done nothing that can be called a miracle: using the word, not simply as a strong expression, but in its right meaning.

Now, St. John in his account of the beast says, "he doeth great wonders (or miracles), *so that* he maketh fire come down from heaven on the earth in the sight of men, and deceiveth them that dwell on the earth by the means of those miracles which he had power to do," &c.; by which I understand him to mean, that to bring fire from heaven was to work a (great) miracle. But Science has brought fire from heaven, therefore Science has wrought a (great) miracle. It is not necessary, however, to trust merely to an arrangement of words; the truth seems to be that the wonders of

Science are really of the same nature as miracles, even the miracles of the Bible.

And first of all, why does it seem strange to compare scientific wonders with miracles? I suppose because we know how the former are done; or rather, perhaps, because we know that they are not done in opposition to the powers of nature, but by those powers, subject to natural laws.

Now, how can it be proved that the miracles recorded in the Bible were wrought in opposition to the powers and laws of nature, and not, rather, by means of those powers acting in subjection to those laws?

Or, to express it in the usual manner, How can it be proved that the miracles were a suspension or violation of the laws of nature? If a man knew *all* the secrets of nature, doubtless he would be able to say whether they were so or not; but till he knows *all*, how is it possible for him to know any thing more about the matter than the miracles themselves tell him[1]? That a miracle was often *apparently* a violation of the laws of nature is true; and are not the wonders of Science so too, while new to the world, to all who are ignorant of the means by which they are done? For such persons cannot, of course, see any connexion between the new wonder and familiar effects in nature, though both may be produced by means of the same natural powers.

[1] See Appendix C.

Having at last discovered the true way in which to study nature, man has found in nature powers and laws, by a knowledge and by a use of which he is able to produce effects never dreamed of in past ages; and such effects as, could they have been done before us without visible means, we must have called miraculous. But when the invisible God sends His messenger, and by him, or rather in answer to his prayer or at his word, works a miracle, must it be considered a suspension or a violation of the laws of nature because the means by which it was done are invisible? and because it is so unlike all our experience that it *seems* to be a violation of the laws of nature? Surely, whatever may have been thought before the wonders of Science were seen in the world, and the powers of nature discovered by Science were known to exist, it ought not now to be so considered; Science itself bears witness to the truth (or truism) that ignorance of the existence of a power in nature is no proof that it does not exist. It does not follow that we must believe any marvellous thing we may hear of, because *possibly* powers may exist in nature by which it could be done though we know nothing of them; for the testimony of generations, and the belief of ages founded on that testimony, is positive knowledge; and it is that knowledge, and not ignorance, which is our starting-point. The knowledge is that certain things have been done; the way in which they were done is the point on which we are ignorant. Our being able to do

wonders ourselves by means but newly discovered, ought therefore to confirm, rather than to shake, the faith in those still greater wonders which must be beyond human power to do.

It is in obedience to a law of nature, that a weight, alone in the air, falls to the earth; but a man can toss a weight up into the air! Here is the intervention of a living being; yet the laws of nature are not violated, though an effect is produced *apparently* in opposition to that great law which holds even planets in their places. The hands of a clock may be moved backward or forward without for a moment stopping the clock, by means of the very key with which it was wound up; and this great alteration seems to stand in the same relation to the ordinary and regular movements of the clock, in which miracles do to the ordinary course of nature. Neither are these new ideas. Dr. Price, in a "Dissertation on Providence[2]" published in 1767, maintains that no opinion can be more groundless than the common one that miracles imply a suspension or violation of the laws of nature. As an illustration he gives the example of a river parted in its course at the word of a man, as Jordan was. Here, he argues, the law of gravitation is not necessarily suspended, for the water may gravitate as usual, but be held up by an adequate superior power; in which case the suspension of the law is no more implied than it is

[2] "Four Dissertations," by Richard Price, F.R.S. Dis. I., Sect. 3, p. 81.

in a man's preventing a heavy body from falling by applying his hand to it. Neither will he admit that in this case of the river we should have any right to say that the event was not agreeable to the constitution of the universe, since to do that we must know what the constitution of the universe really is (taking in the invisible as well as the visible world) and how far it admits of the interposition of superior power in human affairs. And again, in his dissertation on historical evidence and miracles, he declares, that the violation of natural laws is no more implied in a sensible and extraordinary effect produced by superior power, than it is in any common effect produced by human power.

A miracle is, then, an exercise, and a sign of *power over nature*. When the Creator works a miracle, therefore, the power shown is absolute; but when man, by the knowledge he has acquired of the laws of nature, does "great wonders," the power shown is not the less real because it is limited; and the difference between the miracles of the one and the wonders of the other seems to be more truly a difference in degree than a difference in kind. But let it be understood, that by an exercise of power is not meant any greater *exertion* than usual, but merely a visible manifestation, sufficiently unlike our experience to show it to be, not what we call *natural*, but something above nature. Of course God's miracles are supernatural and superhuman in this sense, that

they are not only a something more than the ordinary working of nature's powers would produce, but also more than these powers could be made to produce under the directing mind and hand of man; otherwise they would not answer their purpose of showing that he at whose word they were wrought was sent by God. But it does not follow that they are therefore supernatural in the sense in which they are usually spoken of as supernatural, viz. as something to do which nature's powers must be set aside altogether as a hindrance instead of a help.

The wonders, or miracles, of Science are experiments. Franklin's wonder was an experiment properly so called; i. e. a trial in order to find out the truth of a theory. Still, the idea existed first, and Franklin would have been more surprised, I suppose, if the spark had not come down than he was when it did. In short, the experiment was not like the throwing of dice, but was the result, and an expression of knowledge. Being successful, it was the proof to the world of the truth of his theory; and this, of course, applies to all such experiments[3]. Now, when a scientific lecturer shows what he calls "experiments" to his audience, he neither works in ignorance, nor in doubt as to their result; he uses them in the same manner as the miracles of the Bible were used, as the proofs of knowledge and power; and they become, there-

[3] See Appendix D.

fore, the seal of truth. The tricks of a conjuror are an imitation of miracles, that is, his wonders are illusions, and his intention not being deceit, the effects are both astonishing and pleasing. Were he to call them real he would simply be an impostor. But the experiments of a scientific lecturer are not illusions, but realities, produced as he describes them to be produced (if he choose to explain how he does them); and this is the case with the miracles of the prophets, only that the means were not explained, that being not only quite foreign to the purpose for which they were wrought, but, probably, far beyond man's power of understanding; for it must be remembered, that our knowledge of even such things as we are supposed to understand is only a partial knowledge of means and effects, never that of ultimate causes[4].

It may be worth noticing, that many scientific wonders are addressed much more to the eye, are more dazzling and *showy* (if I may use the expression) than many of the Bible miracles were. When water was turned into wine, for instance, nothing could be less of a mere sight, or more unobtrusive than the manifestation of power. "Fill the water-pots with water," said our Lord; "and they filled them up to the brim." "Draw out now, and bear unto the governor of the feast. And they bare it[5]." Here it was the servants who

[4] See Appendix C.

[5] John ii. 7, 8.

drew the water that saw the miracle; and all they could have told of it seems to be,—whereas that which we poured into the water-pots was water, now it is wine.

But we may go a step further, and find, I think, proofs in some of the Bible miracles that the powers of nature were actually used in the performance of them. Does not the knowledge which Science has given us, make it at least seem probable, that when "the fire of the Lord fell" in answer to Elijah's prayer, God Himself may have used what we call electricity? since the fire does not seem to have been different from ordinary fire, only acting with great intensity of power. However, in some of the plagues of Egypt, which were interferences with the ordinary course of nature for a special purpose, we actually find the powers of nature used. For instance,—

"(12) And the Lord said unto Moses, Stretch out thine hand over the land of Egypt for the locusts, that they may come up upon the land of Egypt, and eat every herb of the land, even all that the hail hath left.

"(13) And Moses stretched forth his rod over the land of Egypt, and the Lord brought an *east wind* upon the land all that day, and all that night; and when it was morning, the *east wind* brought the locusts[6]."

Again; when in consequence of the earnest

[6] Exod. x. 12, 13.

request of Pharaoh, Moses "entreated the Lord," it is written, "(19) And the Lord turned a mighty strong *west wind*, which took away the locusts, and cast them into the Red Sea; there remained not one locust in all the coasts of Egypt." Here, while the word of the Lord to Moses, and the stretching forth of the rod of Moses in obedience to it in order that the locusts might come, plainly shows the miraculous nature of the plague, the east wind blowing "all that day, and all that night," shows, I think, as plainly, that the locusts came from a distance, and in such a manner as they might in the ordinary course of nature; certainly that the powers of nature were used to bring them.

Again; why should the locusts be sent at all to eat every herb of the land, if the powers of nature must be set aside when God acts miraculously? "He spake the word and there came all manner of flies;" but why could not the same word have caused the work of the flies to be done without using them as the means, if it were not that God employs the powers and laws of nature, even in special and unusual, or, as we call it, miraculous manifestations of His own power?

I conclude, therefore, that in applying the word "miracle" to the wonders of Science, we are doing no violence to its true sense.

Another point on this subject of miracles now remains to be noticed. Has the devil ever had, or have we reason to believe he ever will have,

the power of working miracles to help him in deceiving men? Had I lived before the days of Science, I should, no doubt, have believed in his having such power; but it must be obvious, that the whole drift of this interpretation of the prophecy shows a belief that Satan's power is, now, at any rate, limited to *deceit;* and that it is by the intellect of man that he may be said to have worked his miracles; trapping it in its own pride, and using it as a tool to serve his own purposes. And here let it be understood that I am not denying the possibility of Satan's having power in, and over nature even now. We find in the book of Job, that, by the express permission of God, he had power over the houses, cattle, children, and health of Job [7]. But this power does not seem to have been exercised miraculously. Job's plagues were trials; the plagues of Egypt, on the contrary, were judgments, and miraculous; that is, visibly an interference with the ordinary course of nature, and by God Himself. Interference is not in itself necessarily miraculous; since it is, according to the Bible, the rule and not the exception. What we call the ordinary course of nature may, for any thing we know to the contrary, be made up of such interference. But startling *visible*, or known interference for a special purpose is miraculous. Job, for example, was told that as his sons and daughters were feasting in their eldest brother's

[7] Job. i. and ii.

house, there came a great wind from the wilderness and smote the four corners of the house, and that it fell upon the young men and killed them. To him, therefore, the event, however terrible, was *natural.* When the Egyptians found the east wind bringing the locusts, had not the word of Moses to Pharaoh gone before,—

"Thus saith the Lord God of the Hebrews, How long wilt thou refuse to humble thyself before Me? let My people go, that they may serve Me.

"(4) Else, if thou refuse to let My people go, behold, to-morrow will I bring the locusts into thy coast[s]:"—the natural manner in which the event happened, might have prevented its appearing miraculous. As it was, they knew that the Lord God of the Hebrews was controlling nature, and proving Himself to be the God of nature; their God therefore as well as the God of the Jews; and the plague was looked upon as miraculous.

One word more before leaving this subject. The scientific rationalist often declares, he cannot believe that God would break His own laws by working miracles. The believer says, that God is omnipotent, and therefore could as well break, as make those laws. But his argument is only of force to those who are, like himself, believers, and therefore satisfied that miracles were wrought, whether they can be accounted for naturally or not. Yet ought he so readily to admit that in miracles God's

[s] Exod. x. 3, 4.

power is shown by the breaking or setting aside of His own laws? When we remember how small our knowledge of nature and of God's manner of working in nature really is, it seems to me that we have no right to say that every operation which differs from our experience, if the special work of God, is something for which the powers and laws of nature are inadequate. For the admission that the laws of nature are suspended in miracles is founded on the *assumption*, that nature, as God made it, will not admit of such an interference with its ordinary course, even by God Himself. As if, when He made the universe, though in His omniscience He knew that He must reveal Himself to man, and use miracles in that revelation, He left Himself no means by which He might show His control over the great machine, without breaking or stopping its works! This can hardly be a worthy idea of the wisdom and the power of God. Surely, then, the believer as well as the unbeliever may look upon the laws of nature as perfect, and therefore never *needing* to be set aside; and may believe, that in nature, as in human nature, when the power of God is manifested to men, it is not in the destruction but in the fulfilment of law.

CHAPTER VII.

THE GREAT WONDER OF THE BEAST.

"And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men."—REV. xiii. 13.

THE question now arises, what place among scientific wonders does that particular one hold, which I suppose to be described by St. John when he speaks of the beast making fire come down from heaven? If it held an inferior place, this would, no doubt, be a strong reason for thinking that it could not be the great wonder of the beast. But may it not, on the contrary, fairly be considered the grandest visible representative of the greatest discoveries ever made by man? namely, those which are summed up in the knowledge we have of electricity[1].

Now, when Elijah confounded the priests of Baal, and proved to Israel that the Lord is God, by a great miracle which the Lord wrought in

[1] See Appendix E.

answer to his prayer, this was the one selected; "the God that answereth by fire," said Elijah, "let Him be God. And all the people answered and said, It is well spoken." And "the fire of the Lord fell, and consumed the burnt sacrifice, and the wood, and the stones, and the dust, and licked up the water that was in the trench.

"(39) And when all the people saw it, they fell on their faces: and they said, The Lord, He is the God; the Lord, He is the God[2]."

It is well known with what awe the heathen look upon fire from heaven, so that among the ancients, places struck with lightning were considered sacred.

The story of Prometheus must occur to every one, and is much too well known to make it necessary to do more than allude to it here.

Now, whether Science be the false prophet or not, it has literally done that great wonder which it was predicted the false prophet should do. And the wonder takes the same rank among the great things of Science, that, according to the prophecy, and the instinctive feeling of men, we should expect it to take. Is it probable, then, that this wonder will in the future be done as a sign of supernatural power by a false prophet? Would it be accepted so now by men who could say of it, We have done this ourselves?

There is another reason, and not, I think, an

[2] 1 Kings xviii. 24—38.

unimportant one, for giving the subject attention, which is this; if the theory now advanced be true, and the fulfilment of the prediction be what I have described, so unlike is it to any thing we should beforehand have expected (with the miracles of Elijah to guide us) that, though true to the letter, in no way could the prophecy have influenced the actions of the men who brought about its accomplishment. It is moreover a significant fact, that the Revelation which contains the prediction could have had no interest for Franklin, since he had, early in life, altogether rejected Christianity.

CHAPTER VIII.

EFFECT OF THE MIRACLES.

"And deceiveth them that dwell on the earth by the means of those miracles which he had power to do in the sight of the beast."—REV. xiii. 14.

As the beast's authority is derived from his miracles, so the authority of Science is founded on its wonders, since they are the proofs of its truth[1].

Now, the argument of the present time seems to be, that as we *know* Science to be true we must test Revelation by it. Yet Science is not the knowledge of God, but of the works of God; not light from heaven, but a light of man's own kindling here on earth; only so suddenly has it burst forth that many have been dazzled by it and thought it the true light, whereas the true Light is He "which lighteth every man that cometh into the world[2];" the Sun of Righteousness. So,

[1] See Appendix F.

[2] John i. 9.

blinded by the attractiveness of this suddenly appearing light of knowledge, men have rushed to it like moths to a candle; and the last state of the world is likely to become worse than the first. For according to modern rationalistic notions, the faith once delivered to the saints, eighteen hundred years afterwards (that is, in our own day) is for the first time beginning to be understood! and understood, not because it was revealed to men, but because they have at last discovered the true way in which to study nature! And the light of the sun shining from heaven must be *tested* by that light, which man, by the power of his own intellect, has struck on earth: and it is *not* "by every word that proceedeth out of the mouth of God" that man is to live, but by the unassisted strength of his own mind.

For that there is in this nineteenth century, of which we are so proud (and which, by the by, we sometimes seem to forget is dated from the coming of Christ), an opposition between Science and the Bible is a well-known fact. The two seem "contrary the one to the other." Indeed, were it not for that opposition, Science would not now be spoken of as a *false* prophet.

Yet there seems to be no reason in the nature of things, why Science should lead men to take the side of natural against revealed religion (for this is the whole drift of the dispute)[3]; why the

[3] See Appendix G.

knowledge of one kind of truth should lead to the rejection of another kind. That it is not a necessity is proved by the fact that some of the very greatest of scientific men have been good Christians; and since Physical Science is the knowledge of the laws of nature (the work of God's hands) and Revelation concerns the living soul (the breath of His mouth) there would seem to be nothing to lead to an opposition between them; unless it be, that there is something so flattering to the pride of the human intellect in the discovery and knowledge of the deep things of nature, that a revelation which passes by such knowledge as "vanity" becomes "foolishness" to it. Now, the miracles recorded in the Bible are one of the first and greatest difficulties, I believe, in the way of the scientific rationalist. Yet (if there be any truth in what has been before said about miracles) the more power men obtain over nature themselves, the less, certainly, ought belief in those miracles which were the signs of God's power to be a difficulty. Again; a habit of looking upon the supernatural power shown in the miracles of the Bible as appearing in unconnected patches, which may be got rid of without injuring the really essential part of the book, has been a strong reason with the objector to the miracles for giving such an interpretation of them as will get rid of them. But the truth being, that instead of really unconnected patches, they are patches unconnected only on the surface, beneath which they are

united, so as to resemble rock cropping out on the hill side, rather than stones scattered over it, it becomes an impossibility to get rid of them, without at the same time altogether getting rid of the Revelation in which they appear, and falling upon that Rationalism, which would make nature complete without God, man complete without his soul, and the cleverest man the greatest prophet.

One illustration of the way in which that knowledge, which in its proper place is truth, may become a *false* prophet by leaving its proper place, it will be well perhaps to give here, and one I think will be enough. Self-preservation is often called "the first law of nature;" yet our Lord says to His disciples, "He that loveth his life shall lose it; and he that hateth his life in this world shall keep it unto life eternal[4]." Here we have "the first law of nature," an instinct implanted in us by God the Creator, overruled by the revealed will of God the Redeemer; showing, as it is expressed in another place, that "Man shall not live by bread alone, but by every word that proceedeth out of the mouth of God." And that, therefore, no knowledge of those laws which govern either animate or inanimate nature where the living soul is *not*, can be of any force in opposition to revealed laws; or satisfactory as a rule of life, where the living soul *is*, i. e. that such knowledge is not a sufficient guide for the life of man. When, therefore, it

[4] John xii. 25.

exalts itself, and opposes Revelation, *because in its proper place it is true*, its truth profits it nothing, for it is used to give weight to falsehood; it becomes a *false* prophet, and, like the beast, only *deceives* them that dwell on the earth by the means of those miracles which it has power to do.

But there is another point to be remembered.

An opposition between Science and Scripture is often spoken of as an opposition between *Nature* and Revelation; yet it is not necessarily so. For Science is not *nature*, but *human knowledge of nature;* and therefore a limited and imperfect knowledge. It is given to the world by scientific men, who must frequently alter their opinions with the growth of their knowledge; for they have often attacked one day, what they have been obliged to admit was truth the next. How far scientific contradictions of Scripture are really, or only apparently those of nature, is not the point here, since it is enough for all practical purposes that men are influenced by them believing them to be nature's own. The difficulties of one generation may be cleared up by the next; but meanwhile they do their work. The beast butts against the True Vine, and many unsound branches are snapped off by the shock.

CHAPTER IX.

INFIDELITY AND FAITH.

To give some idea of the present position of the Rationalistic school, and what we may expect from it; but principally to show how Rationalism considers itself to be the fruit of Science, I will here give a few extracts from the Westminster Review of 1864 (which at any rate have the merit of speaking out boldly), contrasting them with the opinions of one whom no scientific man can think lightly of, since he is the father of modern Science, I mean Lord Bacon.

The Westminster Review of April 1864, at the close of an article on the "Abolition of Religious Tests" (page 393), gives its own opinions on "a question which (it says) cannot long be absent from any thoughtful or observing mind at the present day—the prevalence of religious doubt."

The matter is brought to a point thus,—

"The question which the present age has to decide is this:—Is man's moral nature subject to

the same law of progress as the rest of his faculties? Have we reason to suppose that his notions of God, of right, of wrong, of holiness, of sin, form a strange exception to the general rule of his being, and are exempted from those conditions of slow but constant change which influence his other ideas and emotions? Has man, once for all, been provided in any of the traditional creeds of Christendom with something invariable and indestructible, which no progress can throw out of date, no discovery permanently injure, no change of circumstance render unsuited to society? These questions are now fairly put before the world, and must be answered one way or the other. They can no longer be evaded and put aside till a more convenient season. They stand in every man's path, and stop his progress till he has given his reply, which sends him to the right or to the left."

(Yes; to the sheep, or to the goats.)

"On the Continent, as it is well known, these questions are a hundred years old and more; and among the cultivated classes at least they have been answered in a way which is also well known; but England differs from the Continent in many respects, and in nothing more than in the relation she has hitherto held towards religion. Fifty years after Voltaire had done his best or his worst, English gentlemen, statesmen, and scholars were still Christians as authentic and as believing as St. Louis himself, while the analogous classes on the Continent were—well it is hard to say what

they were, except that they were not Christians. England had become a moral fossil in Europe, and the mixture of wonder and contempt which the vulgar Frenchman or German felt always called upon to manifest with regard to the 'hypocrisy' of the English, became quite offensive in certain portions of their literature. It would lead us too far to inquire into the causes of this marked difference between our countrymen and foreigners; but we may say this much, *that the immense development of political and commercial activity in this country has contributed not a little to the withdrawal of public attention from high speculative topics of all sorts, religion included*[1].

* * * * *

"Time, however, was doing its work. *Science was noiselessly undermining the old fabric of Orthodoxy.*

"And now it seems as if a great change were at hand. It cannot be said now that sceptical opinions fall inert on the public mind. Rather, they fall like sparks on tinder. They pervade literature and society like an atmosphere or a gas which no doors or windows will exclude. They have reached the Universities; they may even be heard from the pulpit. All men seem to say,—'The Old, the solemn, venerable Old, was good, but we must have a New and a better. The old Jewish garments are no longer suited to us; they

[1] The Italics are my own.

impede our movements, they half strangle us at our work. We must get them off at all risks."

Then, speaking of the clergy,—

"They seem determined to force on a conflict with the spirit of the age; they seem utterly ignorant of the entire feebleness of their position; they denounce and scold and 'rebuke' the world, and do not perceive all the while that the world is only politely and *mercifully* waiting for them to say something pertinent and to the point, if they have got any thing to say." (Merciful wolf! Illogical lamb!) . . . "Yet can they doubt that they are losing day by day their hold on the intelligent laity?

"If they do doubt, we, as laymen, and better placed for observation than they are, can tell them it is so; that their proceedings are watched now with a curious interest, soon to be replaced by an angry one[2];—angry, we say, not because laymen cannot endure difference of opinion from themselves, but because it is only human to be incensed at contemptuous scorn of *reason*, and vociferous clamour poured forth without pause or modesty in behalf of an evil cause."

(*An evil cause!* The cause of that Scripture they believe to be the word of the living God, and which tells them "though we, or an angel from heaven, preach any other gospel unto you than that which we have preached unto you, let him be

[2] I am a layman, but not sufficiently "intelligent" to feel the growing anger so eloquently described.

accursed. As we said before, so say I now again, If any man preach any other Gospel unto you than that ye have received, let him be accursed[3].")

"*In truth the attitude maintained towards Science is getting to be hard indeed to bear.* Rubrics, Canons, Creeds, these we must revere, these we must accept, or, 'without doubt, we shall perish everlastingly.' But the laws which the Eternal has given to His creation may or may not be important. If they agree with our Rubric, well and good; if they square with our Articles, they are not beneath notice. But if they do not agree—if they suggest doubts as to the Rubric!" —(Why are our thoughts turned off to the Rubric? It is the *Revelation* we are concerned about; *those* "*old Jewish garments.*") "'Here, then, is the mode of rightly striving against doubt. Treat it as a temptation of the enemy. . . . . Watch against it, work against it, pray against it . . . . Fling it from you as a loaded shell shot into the fortress of your soul[4].' *Ipse dixit.* Change, growth, development, may be allowed to pervade the universe of things from insects to solar systems; the very floor of heaven itself, bright with those serene orbs which give us our deepest and sublimest ideas of infinity and eternity, is moving, is passing away, and shall wax old as doth a gar-

[3] Gal. i. 8, 9.

[4] Sermons of the Bishop of Oxford. Sermon xiv. "Doubts as to the Revelation."

ment;" (If so we must have been wrong to get our ideas of eternity from it;) "but the notions of a Council, of a Church, the propositions agreed upon after a faction fight at Nicæa, at Chalcedon, the dogmas which arose in the powerful but gloomy mind of Calvin—these, forsooth, are to last for ever!"

(Who says so? I never heard it before. The Son of God said, "Heaven and earth shall pass away, but My words shall not pass away[5]," and that I believe.)

"Our conclusion, then, is that neither the physical nor moral mechanism of the world is likely to stop at present; that the stream which has flowed from the great primeval dawn of existence is not probably going to be frozen into an ice-pack of Orthodoxy. We believe that the world is going onward, but not therefore going to perdition. We have all history to lead us to think that such periods of growth as the present are not periods of decrepitude or decay, but turning-points in the history of man, which are looked back to with admiration and thankfulness by succeeding generations; and in all confidence we expect a future, not darker, but brighter than the past." (So says Babylon, "I sit a queen, and am no widow, and shall see no sorrow[6].")

Lord Bacon's Advancement of Learning. Book IX.:—

[5] Matt. xxiv. 35. [6] Rev. xviii. 7.

1. "The prerogative of God comprehends the whole man; and is extended as well to the reason, as to the will of man; that is, that man renounce himself wholly, and draw near unto God; wherefore as we are to obey His law, though we find a reluctation in our will, so we are to believe His word, though we find a reluctation in our reason: for if we believe only that which is agreeable unto our reason, we give assent to the matter, not to the author; which is no more than we would do towards a suspected and discredited witness; but that faith which was accounted unto Abraham for righteousness[7], was of such a point, as whereat Sarah laughed, who therein was an image of natural reason. By how much therefore any Divine mystery is more discordant and incredible, by so much the more honour is given to God in believing, and the victory of our faith is made more noble: nay, even sinners by how much the more they are surcharged in conscience, and yet repose a trust in the mercies of God for their salvation, by this do more honour God, for all desperation is a reproach of the Deity. Nay farther (if we truly consider the point), it is an act more great and high to believe, than to know, as we now know: for in knowledge man's mind suffers from sense, which results from things materiate; but in belief the spirit suffers from spirit, which is the worthier agent: the case is otherwise in the state

[7] Gen. xviii.

of glory, for then faith shall cease, and 'we shall know as we are known[8].' Wherefore we may conclude, that Sacred Theology is grounded on, and must be deduced from the Oracles of God; and not from the light of nature, or the dictates of reason; for it is written, 'The heavens declare the glory of God[9],' but we never find it written, 'The heavens declare the will of God:' of the will of God, it is said, 'Ad legem et testimonia; si non fecerint secundum illud,' &c. ('To the law and to the testimony,' &c.[1]) "This holds not only in those great mysteries concerning the Deity, the Creation, the Redemption, but appertains also to a more perfect interpretation of the law moral, 'Love your enemies; do good to them that hate you[2],' &c. that you may be the children of your heavenly Father, who commands the rain to fall upon the just and unjust, which words certainly deserve that applause, 'Nec vox hominem sonat:' for it is a voice beyond the light of nature. . . . . So it must be confest, that a great part of the Law Moral is of that perfection, whereunto the light of nature cannot aspire: yet notwithstanding, that men are said to have, even from the light and law of nature, some notions and conceits of virtue, vice, justice, injury, good and evil, is most true and certain. Yet we must understand that this light of nature

[8] 1 Cor. xiii.
[9] Ps. xix.
[1] Isa. viii. 20.
[2] Matt. v. 44.

is used in two several senses: first, as it springs from sense, induction, reason, arguments, according to the laws of heaven and earth; secondly, as it is imprinted and shines upon the spirit of man, by an inward instinct according to the law of conscience, which is a spark, and, as it were, the remains of a pristine and primitive purity: in which latter sense principally, the soul is participant of some light to behold and discern the perfection of the Moral Law; which light is not altogether so clear, but such as in some measure rather reprehends vices, than fully informs us concerning duties: so then, the religion as well moral as mystical depends upon Divine revelation."

* * * * *

On the manner of interpreting Scripture:—

"This is of two sorts, methodical; and solute, or at large: for this divine water, which infinitely excels that of Jacob's well, is drawn forth and delivered much after the same manner as natural waters use to be out of wells; for these at the first draught are either received into cisterns, and so may be conveyed and derived by many pipes for public and private use; or is poured forth immediately in buckets and vessels, to be used out of hand as occasion requires.

"Now this former methodical manner hath at length brought forth unto us Scholastical theology, whereby divinity hath been collected into an art, as into a cistern; and the streams of axioms

and positions distributed from thence into all parts.

"But in solute manner of interpreting, two extremes intervene; the one presupposeth such a perfection in Scriptures, as that all philosophy ought to be fetcht and derived from those sacred fountains; as if all other philosophy were an unhallowed and heathenish thing. This distemperature hath prevailed especially in the school of Paracelsus and some others; the source and spring whereof flowed from the Rabbins and Cabalists. But these men have not attained their purpose; nor do they give honour (as they pretend) to Scriptures, but rather embase and distain them. For to seek a materiate heaven and earth in the word of God, whereof it is said 'Heaven and earth shall pass, but My word shall not pass[3],' is indeed to pursue temporary things amongst eternal: for as to seek divinity in philosophy, is as if you would seek the living amongst the dead; so on the other side, to seek philosophy in divinity, is all one as to seek the dead amongst the living.

"The other manner of interpreting, which we set down as an excess, seems at first sight sober and chaste; yet notwithstanding, it both dishonoureth Scriptures, and is a great prejudice and detriment to the Church; and it is, to speak in a word, when divinely inspired Scriptures are expounded after the same manner that human writings are. For

[3] Matt. xxiv. 35.

it must be remembered, that there are two points known to God the author of Scripture, which man's nature cannot comprehend; that is, the secrets of the heart, and the succession of times. Wherefore seeing the precepts and dictates of Scriptures were written and directed to the heart and thoughts of men, and comprehend the vicissitudes of all ages, with an eternal and certain foresight of all heresies, contradictions, differing and mutable estates of the Church, as well in general, as of the elect in special; they are to be interpreted according to the latitude and the proper sense of the place, and respectively toward that present occasion whereupon the words were uttered; or in precise congruity from the context of the precedent and subsequent words; or in contemplation of the principal scope of the place; but so as we conceive them to comprehend, not only totally or collectively, but distributively, even in clauses, and in every word, infinite springs and streams of doctrine to water every part of the Church and the spirits of the faithful. For it hath been excellently observed, that the answers of our Saviour to many of the questions which were propounded to Him, seem not to the purpose, but, as it were, impertinent to the state of the question demanded. The reasons hereof are two: the one, that being He knew the thoughts of those that propounded the questions, not from their words, as we men use to do, but immediately, and of Himself, He made answer to their thoughts, not to their

words. The other reason is, that He spake not only to them that were then present, but to us also who now live, and to men of every age and place to whom the gospel should be preach't: which sense in many places of Scripture must take place."

CHAPTER X.

THE TWO BEASTS AND THE IMAGE.

"(12) And he exerciseth all the power of the first beast before him, and causeth the earth and them which dwell therein to worship the first beast, whose deadly wound was healed. . . . .

"(14) . . . . saying to them that dwell on the earth, that they should make an image to the beast, which had the wound by a sword, and did live.

"(15) And he had power to give life unto the image of the beast, that the image of the beast should both speak, and cause that as many as would not worship the image of the beast should be killed."—REV. xiii. 12. 14, 15.

THE relation in which the two beasts stand to each other is, to me, the most obscure part of my subject, though it is by no means the least important part. Still, it may not be so obscure to others, and even if it be, the time may not yet be ripe for a full understanding of the prophecy; since the beast must exist before he can act, he must rise out of the earth, show his power in the wonders, and thus obtain his authority, before he can exercise that authority in the manner predicted.

Those who have pointed to some power, either

now existing, or long since passed away, as the beast from the sea, have done so because they thought it resembled the portrait contained in prophecy. In the same manner I have pointed to a present power as the beast from the earth, because I think it resembles the prophetical portrait. Knowledge of the first beast has been, most naturally, looked upon as a proper starting-point from which to discover what is the second. Yet the result has not been satisfactory. It remains to be seen whether, the second being found by his resemblance to his portrait, knowledge of him so obtained may not lead to a more full understanding of the first beast to whom he acts as prophet.

The second, exercises all the power of the first beast before him. Now, the two can hardly, one would think, be exercising a supreme power universally at the same moment. The second, according to my theory, is now reigning. Therefore, it may not be possible for us at present to understand the remainder of the prediction,—that he causeth the earth and them which dwell therein to worship the first beast, whose deadly wound was healed. Be this as it may, I cannot understand it, and therefore shall not attempt to explain it.

The image too may not yet be made; but if made, I must confess I cannot point it out. However, there is one peculiarity about the image that it may be well to notice, viz. the power of speaking, given to it by the second beast. Now, one of the greatest powers of our own time—an essentially

modern power—is that of speech by the Press. May not the image, then, speak by the Press?

Again: it is the image, and not the second beast, which causes persecution. And this manner of describing many of the acts of both the false prophet and the image of the beast may be properly noticed here. The expression, "he causeth," is used of the second beast, but not of the first. I understand by it that the second works on *men* by influence. That he is, as it were, the root from which certain effects naturally grow up. The wonders (whose nature is indicated by the description of one of them) are his direct work—"he doeth great wonders." The giving of the mark, and the bringing about worship of the first beast and of his image, are not *direct* work. And the persecution of the image is spoken of in the same manner,—it *causes* all who will not worship it to be killed.

CHAPTER XI.

THE MARK.

"(16) And he causeth all, both small and great, rich and poor, free and bond, to receive a mark in their right hand, or in their foreheads:

"(17) And that no man might buy or sell, save he that had the mark, or the name of the beast, or the number of his name."—REV. xiii. 16, 17.

BY a mark on the forehead I understand some principle accepted by the mind, believed in, and therefore influencing the life[1]. By the mark on the right hand the same principle simply acted upon, without faith in its truth or goodness. And this idea seems to be supported by the fact that the servants of God were described as being sealed upon the forehead only[2]. In consequence, I think, of their justification by faith only.

No man, we are told, will be allowed to buy or sell save he that has the mark. Buying and sell-

[1] Bishop Newton considers the forehead to represent "open and public declaration" of faith.

[2] Rev. vii. 3

ing are usually understood to stand for civil rights and privileges. Yet I think it not unreasonable to suppose that the more obvious meaning of the expression may, after all, be the true meaning; and that buying and selling may refer to trade. For, that trade is not beneath prophecy is shown by the judgments pronounced against Tyre, the merchant city, by the prophets Isaiah and Ezekiel[3]. The mark, then, is generally treated as if it were a sort of license, without which, men will not be admitted to civil rights and privileges. Yet its nature must depend somewhat upon the nature of the power which gives it; and the way in which it is received, and in which it acts, must also depend, in like manner, upon its nature, and can only be known *certainly* by the fulfilment of the prophecy. If, then, Science be the power which causes the mark to be received, we may, I think, look for scientific principles in that mark. But these can only obtain their authority gradually; and cannot in any way be accepted like a badge. Now, scientific principles which treat of the dealings of man with man, must be either right or wrong, Christian or Antichristian. They are clear and definite, must be accepted or rejected, and if accepted may well be spoken of as a mark. They must be received in one of two ways, either as right, and believed in (i. e. on the forehead), and then they will influence the actions; or as wrong,

[3] Isa. xxiii. Ezek. xxvi. 2; xxviii. 5.

yet necessary to be acted upon for worldly advantage; and then they are as a mark on the right hand. They are not subject to change, as mere rules are, which have not for their foundation the laws of nature. Like those laws, they reign supreme; so that, once established, they may be looked upon as permanent; and therefore should any be accepted as the true principles for the regulation of trade, not only would no man be able to buy or sell, with any approach to success, save he that acted in obedience to them; but, should they be also antichristian, we could hardly expect in the future any other principles to be accepted which would have more the character of a *final* fulfilment of the prophecy.

The question is, then,—Has Physical Science, the wonder-worker, given a mark, for the right hand or for the forehead, without which no man may buy or sell? It has given us Political Economy; a science which every year becomes more firmly established as true, which gives laws to trade, which is hated and opposed by many as thoroughly antichristian, and which may be described simply as the science of getting rich [4].

However, before considering the nature of Political Economy, it will be necessary to show that it is the fruit of Physical Science. This has been already done by Sir John Herschel [5]. He has

[4] See Appendix H.

[5] Discourse on the Study of Natural Philosophy, Part I. chap. iii. (65).

explained that the improvement in the condition of mankind effected by Physical Science is very far from being limited to the increase of our comforts, or the more abundant supply of our physical wants. He treats these as but the steps to higher benefits, and points out the success of the inductive philosophy in natural science as the source of an experimental tone of thought on other subjects, and as the cause of a change in the more complicated conduct of our social and moral relations. Thus, he says, legislation and politics become gradually regarded as experimental sciences, and it is no longer true that nations never profit by experience, for Political Economy, at least, has been found to have sound principles founded in the moral and physical nature of man; which, however much they may be lost sight of at times, or be now and then overcome by clamour, have a stronger testimony borne to them in each succeeding generation, by which they must, sooner or later, prevail.

Now, when Science begins to give laws for the life of man, it takes upon itself the office of a prophet or teacher; if the laws be wrong, it is a false prophet. It is not very likely that any laws which Science may give should be themselves false. On the contrary, the very fact of their having been discovered to be *natural* makes it most probable that they will be true; that is, that if acted upon they will lead to the results to which they profess to lead. But to be *true* is not necessarily to be *right* in human matters; and if the laws of Poli-

tical Economy clash with revealed laws, it is the scientific, or natural, laws that must give place, and not those revealed; and the real worthlessness of the argument, that Science being true, Revelation must be tested by it, is shown; since, if a revealed law contradicted one which Science has found in nature for us, it must (on that principle) be considered as false; and the very morality, which even the infidel now calls "sublime," must give place to another morality of merely human origin; as much as miracles, the proofs of Divine power, must (according to the rationalist) give place to scientific wonders, the proofs of merely human power.

So it may be quite true that acting upon the principles of Political Economy will bring wealth to a man or to a nation; but whether it be *right* to act on them for this purpose is the really important question.

I think I am justified in saying that Political Economy has too much temptation mixed up with it for it to be right; since not even its greatest admirer will, I believe, declare that it would be right to follow it to its last consequences. Now, a system which will produce certain apparently desirable results if followed out, but which cannot be fully followed out unless a man were to get rid of his feelings and his conscience, seems to me to be a system of *temptation*, and therefore anti-christian.

For Political Economy teaches a man, that by working in obedience to certain general laws, and

for his own interest solely, he will really in the end be doing more good to the whole community than he would be doing if he allowed present, and perhaps local, distress to turn him from following those principles, and to lead him to sacrifice himself for others. And that therefore true wisdom and true charity are to be found in obeying those natural laws by which we shall be led in the end to the greatest *material* prosperity.

If this theory can be reconciled with the doctrines of the Bible about wealth and man's duty, then Political Economy is *not* that mark which the beast causeth all, both small and great, rich and poor, free and bond, to receive.

But, contrast with this "true wisdom," as it is often called, which springs from the brain of man[6], and is not revealed from heaven, the words of Him who is "the wisdom and the power of God."

"(23) How hardly shall they that have riches enter into the kingdom of God!

"(24) And the disciples were astonished at His words. But Jesus answereth again, and saith unto them, Children, how hard is it for them that trust in riches to enter into the kingdom of God!

"(25) It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God.

[6] Dr. Adam Smith, the father of the modern Science of Political Economy, was an avowed infidel. "Whose is this image and superscription?"

"(26) And they were astonished out of measure, saying among themselves, Who then can be saved?

"(27) And Jesus looking upon them saith, With men it is impossible, but not with God: for with God all things are possible[7]."

"(24) No man can serve two masters: for either he will hate the one, and love the other; or else he will hold to the one, and despise the other. Ye cannot serve God and mammon.

"(25) Therefore I say unto you, Take no thought for your life, what ye shall eat, or what ye shall drink; nor yet for your body, what ye shall put on. Is not the life more than meat, and the body than raiment?

"(26) Behold the fowls of the air: for they sow not, neither do they reap, nor gather into barns; yet your heavenly Father feedeth them. Are ye not much better than they?

"(27) Which of you by taking thought can add one cubit unto his stature?

"(28) And why take ye thought for raiment? Consider the lilies of the field, how they grow; they toil not, neither do they spin:

"(29) And yet I say unto you, That even Solomon in all his glory was not arrayed like one of these.

"(30) Wherefore, if God so clothe the grass of the field, which to-day is, and to-morrow is cast

[7] Mark x. 23—27.

into the oven, shall He not much more clothe you, O ye of little faith?

"(31) Therefore take no thought, saying, What shall we eat? or, What shall we drink? or, Wherewithal shall we be clothed?

"(32) (For after all these things do the Gentiles seek:) for your heavenly Father knoweth that ye have need of all these things.

"(33) But seek ye first the kingdom of God, and His righteousness; and all these things shall be added unto you.

"(34) Take therefore no thought for the morrow: for the morrow shall take thought for the things of itself. Sufficient unto the day is the evil thereof[8]."

"(33) Sell that ye have, and give alms; provide yourselves bags which wax not old, a treasure in the heavens that faileth not, where no thief approacheth, neither moth corrupteth.

"(34) For where your treasure is, there will your heart be also[9]."

This is true wisdom, for it is God's, and it seems to me contrary to that human wisdom called Political Economy; for I cannot understand how that desire for wealth which has worked out a Science of getting it, can be reconciled with such a sacrifice of the world as that described in what I have quoted.

I think, then, that Political Economy may be

[8] Matt. vi. 24—34. [9] Luke xii. 33, 34.

the buying and selling mark. Now, it is said that the beast "causeth all, both *small* and great, rich and poor, free and bond," to receive the mark. The "small" may be those of small account, yet there is another way in which (in this case at least) the "small" may be understood. In England, Political Economy is taught in schools! I mention this because, though all know how it is forced upon "rich and poor, free and bond," all may not know how some of the "small" have it stamped upon their helpless little foreheads.

CHAPTER XII.

THE BEAST AND FALSE PROPHET.

"And that no man might buy or sell, save he that had the mark, or the name of the beast, or the number of his name."—REV. xiii. 17.

WHEN "the beast" is spoken of alone, I understand the first to be meant; and it seems that the mark, name, and number, are those of the first beast and not of the second, though the second causes them to be received.

Now, there are some passages in which it is not quite clear which beast is intended, and I think this examination of the subject would not be complete unless I were to give these passages, and also every one where the second beast, or false prophet, is certainly intended as well.

In the account of the two witnesses is the very first mention of the beast. "And when they shall have finished their testimony" (that is, the two witnesses), "the beast that ascendeth out of the

bottomless pit shall make war against them, and shall overcome them, and kill them[1]." Most interpretations of the prophecy, I believe, make the beast here mentioned to be the first; and this seems most probable, from the woman, Babylon, being described as sitting upon a beast answering to the description of the first, and which is thus spoken of by the angel, "The beast that thou sawest was, and is not; and shall ascend out of the bottomless pit, and go into perdition[2]."

In the account of the second beast, or false prophet, it is said that he "causeth the earth and them which dwell therein to worship the first beast, whose deadly wound was healed."—That he tells people to make an image to this first beast, gives life to the image that it both speaks, and causes that as many as will not worship the image of the beast should be killed—and that he causes all to receive a mark, "and that no man might buy or sell save he that had the mark, or the name *of the beast*, or the number of his name."

The next mention of the beast is in the fourteenth chapter, where an angel is described as,

"Saying with a loud voice, If any man worship the beast and his image, and receive his mark in his forehead, or in his hand,

"(10) The same shall drink of the wine of the wrath of God, which is poured out without mixture into the cup of His indignation; and he shall be tormented with fire and brimstone in the presence

[1] Rev. xi. 7. [2] Rev. xvii. 8.

of the holy angels, and in the presence of the Lamb:

"(11) And the smoke of their torment ascendeth up for ever and ever: and they have no rest day nor night, who worship the beast and his image, and whosoever receiveth the mark of his name.

"(12) Here is the patience of the saints: here are they that keep the commandments of God, and the faith of Jesus [3]."

Then, when those who have got the victory over the beast are described, their victory is said to be "over the beast, and over his image, and over his mark, and over the number of his name [4]." In both these passages I think the image, mark, name, and number, are spoken of as belonging to that beast who was worshipped, and therefore to the first.

Again; when the first vial was poured out upon the earth "there fell a noisome and grievous sore upon the men which had the mark of the beast, and upon them which worshipped his image [5]."

And "(10) The fifth angel poured out his vial upon the seat of the beast;"—as if only one had been spoken of. After describing the pouring out of the sixth vial, St. John says,—

"(13) And I saw three unclean spirits like frogs come out of the mouth of the dragon, and out of the mouth of the beast, and out of the mouth of the false prophet.

[3] Rev. xiv. 9—12.

[4] Rev. xv. 2.

[5] Rev. xvi. 2.

"(14) For they are the spirits of devils, working miracles, which go forth unto the kings of the earth and of the whole world, to gather them to the battle of that great day of God Almighty."

Here "the beast" evidently means the first, since the second is called by his other name of "false prophet."

The next mention of "the beast" in connexion with the false prophet is in the gathering together of the kings of the earth and their armies "to make war against him that sat on the horse, and against his army[6]." Here again "the beast" is spoken of as if there were but one.

In the very next verse it is said—

"(20) And the beast was taken, and with him the false prophet that wrought miracles before him, with which he deceived them that had received the mark of the beast, and them that worshipped his image. These both were cast alive into a lake of fire burning with brimstone."

Then in the next chapter St. John speaks of "the souls of them that were beheaded for the witness of Jesus, and for the Word of God, and which had not worshipped the beast, neither his image, neither had received his mark upon their foreheads, or in their hands; and they lived and reigned with Christ a thousand years[7]."

The last mention of these antichristian powers is in the tenth verse of the same chapter, where

[6] Rev. xix. 19. [7] Rev. xx. 4.

it is said that the devil "was cast into the lake of fire and brimstone, where the beast and the false prophet are."

These passages seem to me to show that when "the beast" is spoken of, the first is meant; that he is the one from the bottomless pit, and that the second is merely his prophet, and though the giver of a mark, name, and number, that these really belong to the first beast.

Two important points are connected with this part of the subject.

First, In what relation do the mark, name, and number stand to each other? This question I cannot answer, though I think the relation is a close one. For in verse 9, chapter xiv., the name and number are not mentioned, but only the mark; as if that included the others. And in verse 11 of the same chapter the mark is called "the mark of his name;" as if these two at any rate were very closely connected. While in verse 17, chapter xiii., and 2, chapter 15, the number is also called "the number of his name." The second point is this:—

Those who refuse to worship the image of the beast, the image shall cause to be killed. While those who refuse to receive the mark of the beast, shall merely be prevented from buying and selling; whatever such prevention may imply, whether degradation, by the loss of civil rights and privileges, as seems to be usually thought; or, as I suppose, failure in worldly business.

As Babylon sits on the beast, a few words on the relation in which she stands to the false prophet may be expected.

Those who hold that the two beasts are the Empire and the Hierarchy of the Papacy, also believe that Babylon is the Church of Rome. But after the destruction of Babylon, we find the beast and false prophet in existence; and this is one reason for thinking that the Roman Hierarchy can hardly be the false prophet.

Babylon sits on the beast, the false prophet causes the worship of this beast; but nothing is said of his causing worship of the woman Babylon. As, then, the two beasts exist after the destruction of the great whore, and are evidently two separate powers (see chap. i.), it seems that Babylon, the beast, and the false prophet, are three powers naturally independent of each other, though as antichristian they become, to a certain extent, leagued together. The first beast is closely connected with Babylon, for she sits on him. She is, therefore, usually spoken of as governing him; and this, doubtless, is a right interpretation; but she is also *borne up on his strength*, yet this is hardly ever noticed; though, when we remember that she is destroyed while the beast remains, this view should not, I think, be overlooked. If, then, Babylon be the Church of Rome, I do not see that any direct connexion is implied as existing between her and the false prophet.

CHAPTER XIII.

THE NUMBER.

"Here is wisdom. Let him that hath understanding count the number of the beast: for it is the number of a man; and his number is Six hundred threescore and six."—REV. xiii. 18.

OF the name and number of the beast I can say nothing.

I am indebted to a friend for the following original idea of the number.

"In suggesting an explanation of the number of the beast in the thirteenth chapter of Revelation, it seems to me that commentators make a mistake in trying to fit the number to an individual. It is true that in the last verse we read 'Let him that hath understanding count the number of the beast: for it is the number of a man;' but I do not think this is at all equivalent to saying that it is the number of some particular man. By a kind of jugglery (although, no doubt, with perfectly honest intentions) some have asserted that it must mean the Pope of Rome, because one or more of his

names, when dissected into numeral letters, makes up the number 666; but setting aside the incompatibility of the description of the beast with the characteristics of the Pope, De Burgh has shown that many other names, including Luther, Julian the Apostate, and even Jehovah, manipulated in the same way, will form the same number. I have lately seen a book, written by an American, which, with some plausibility, even makes Louis Napoleon to be the beast, and one of the reasons for thinking so, is that the numeral letters of both his name and that of his uncle make up the number 666. Now if different people upon the same grounds, using the same arguments, come to very different conclusions; or if we see that those arguments will lead to a great number of opposing conclusions, I think we may fairly say that they must start from wrong premises. Let me put a case. In this chapter there are two beasts; one rising from the sea, another coming up out of the earth. Suppose it to be asserted that the first beast represents some particular naval power, and the second some particular military power, and reasons fully given for this explanation. If upon examination we found that the arguments would fit not only the nations especially mentioned, but every other naval and military power equally well, I think we might fairly conclude that the first assumption was altogether a mistake. Upon this ground I am driven to reject the idea that the number 666 represents any particular individual.

When we read, 'It is the number of a man,' I understand by that, it is human. I will give you my reasons. This beast is evidently the embodiment of great power. He combines the characteristics of the four beasts of Daniel. He is as a lion, a bear, a leopard, and, like Daniel's fourth beast, has ten horns, and is exceeding terrible and strong. He is also of a very persecuting nature, compelling men to worship him. He is the personification of ambition, obtaining authority over the nations of the earth. He puts himself in opposition to God, and the servants of God. He seems to be the picture of some great king of men whose mightiness so lifts him up that he looks upon himself, and is looked upon by others, as at the summit of human greatness. To confirm this feeling, he recovers from a blow so deadly, that ordinary men would undoubtedly be destroyed by it. The healing of this wound completes the delusion under which the nations of the earth labour, and from henceforth, when the beast issues his commands, they cry, as they did to Herod, 'It is the voice of a God, and not of a man.'

"In Scripture language two numbers have been used to signify perfection, seven and three. Both these numbers are freely applied to God. The perfect Spirit of God is denoted by the seven spirits; and the perfect Godhead is denoted by the number three, the Trinity. If then it were written, 'Let him that hath understanding count the number of God,' what number would seem so obvious

as three sevens—777? Here it says, 'Count the number of the beast, for it is the number of man,' for it seems to me that 'the number of a man' means the number of man as opposed to the number of God. Now if we examine in this light, it will seem that this beast is the representative of the highest development of human power. He possesses great physical authority, and this is vastly assisted by his compact with the second beast, who is the representative of human intellect, or Science. If then we have a union between the greatest material human force, and the highest development of human intellect, the result is human perfectibility. It seems already that Science, puffed up by the discoveries in God's physical world, and by the theories of moral government, is, with rapid strides, advancing to the rejection of the God of Science and of morality. Ambition has never allowed Divine laws to hinder its designs, and when these two are combined we shall then have the greatest development of humanity, and the beast will be revealed. His number will be 666, for if Divine perfection be fitly represented by three sevens, may not human perfection (something just short of absolute perfection) be with equal fitness symbolized by three sixes? For these reasons, I consider the beast to signify human power in its two natures, physical and intellectual, and so conscious of its own greatness that it rushes into infidelity and blasphemy, ignoring any higher power than itself, believing its number to be 777, while in

reality it is only 666. I think that the first beast represents open, practical infidelity. To a certain degree this has existed from the earliest times. It was exhibited in the first murder. It is human energy depending on itself, working out its own will, ignoring a superintending Providence. In the days of Nimrod it excited the admiration of the world; in the person of Nebuchadnezzar men were drawn to worship it; but it will not be developed to the fullest extent till it has the alliance of the second beast—theoretical infidelity. Hitherto, knowledge, civilization, the arts of peace, have been against the savage persecution of the first beast. Now, Science is putting the revelation of discovery in the place of the revelation of God, and when it has become the 'prophet' of infidelity, then we shall see the personification of the number 666.

"You see that I have quite adopted your idea of the second beast, but that idea seems to fit in so well with my own, that I think by union they help each other[1]."

[1] See Appendix I.

CHAPTER XIV.

CONCLUSION.

BEFORE leaving the subject, there are one or two observations which it may be well to make on the theory looked at as a whole.

The wonders are its foundation. With regard to Political Economy, there is this great difference between it and the wonders of Science considered as those of the second beast. Political Economy may be an abomination and yet not that particular abomination called the mark of the beast. It may be antichristian and yet have no connexion with the false prophet. The wonders of Science, on the contrary, not being bad in themselves, must be either those predicted, or the power by which they are done must be altogether acquitted. Every thing rests on them. St. John predicts the rise of a wonder-working power, which is to be antichristian. From his description there seems reason to think that it will become so sooner or later, and not be absolutely bad at first. Since St. Paul describes the "man of sin" as one "whose coming

is after the working of Satan with all power and signs and lying wonders[1]," it is supposed by some that this second beast of the Revelation works miracles by the power of Satan; but by others it is thought that in truth his wonders are not real but pretended miracles. Yet from the account in the Revelation we should not get either of these ideas. There, the beast is described as having power in himself to do wonders. According to my view, the devil makes use of them in his true character of tempter and deceiver. But, let it once be admitted that Physical Science is the beast, and the connexion between it and Political Economy becomes a reason for thinking that Political Economy, if evil, may be the predicted mark; and therefore I have pointed out this connexion, and put forth the idea. Briefly, the case is this,—

St. John sees a beast, or power, coming up out of the earth. He has two horns like a lamb, and he speaks as a dragon. This is all that is said of his origin and appearance.

"And he exerciseth all the power of the first beast before him."

"And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men."

He has also power to give life to an image which, by means of his miracles, he has deceived

[1] 2 Thes. ii. 9.

men into making to the first beast; that the image "should both speak, and cause that as many as would not worship the image of the beast should be killed."

This is all that is said of his *direct* work.

Horns are the symbols of strength or power. The two horns of the beast are then, I suppose, the key to his power of doing wonders, and they resemble the horns, or strength, of a lamb, or the Lamb of God; while the speaking as a dragon, or serpent, shows that the beast's teaching is like the dragon's, or the devil's.

More than a thousand years after St. John wrote his vision, Physical Science, a wonder-working power, rose up in the world.

It came from the earth; since its origin was both human and material.

Its strength lies in the union of two natures, and these resemble the two natures whose union gives strength to the Lamb.

It is able to do great wonders; and it has already, and literally, made fire come down from heaven on the earth in the sight of men. This wonder (like that of the beast) is connected with its very greatest achievements; with a knowledge of nature far exceeding any knowledge to which man has before attained.

Yet all this would go for nothing were no ill effects to result from so tremendous a power. But, like the beast, it speaks as a dragon. It is at this present time the great opponent of Reve-

lation, of the written Word of God; and the great fortress of the infidel, and the armoury from which he borrows his weapons. Scientific men may protest against Science being considered antichristian; but how is it, then, that the infidel points to Science as the foundation of his infidelity? It is simply a fact that Science is the great source of infidelity in the present day.

Again; the rise of this power was a turning point in human history. It is the first, and only *merely human* wonder-worker that has been, or can be in the world. This alone would cause us to look upon it with suspicion as, so far, strongly resembling that beast seen by the prophet, whose peculiarity it was to do great wonders. But when to this resemblance is added the opposition to Christianity itself which the new power has either caused, or so greatly helped, though much may yet remain to be accomplished, one can hardly, I think, avoid the conclusion—this is, of a truth, that *false* prophet that should come into the world.

But if these views of the meaning of the prophecy be true, it follows, that that scientific opposition to the Bible which seems likely to leave not one stone of the building upon another, is really strengthening its foundations. For there are two external proofs of the Divine authority of the Scriptures; miracles, for those to whom they were first delivered; and prophecy, for those who live in after times. The whole strength of scientific

infidelity is given now to a destruction of belief in miracles; yet the wonders of Science itself are a proof of their possibility; while the opposition which Science has caused to the Word of God proves the truth of prophecies in the most effectual manner, viz. *by fulfilling them.* Nor is this a new thing in the world, for the Jews helped to prove that Jesus of Nazareth was their much longed-for Messiah, by despising and rejecting Him when He came, and thus fulfilling the prophecies concerning Him[2].

[2] See Appendix Z.

APPENDIX.

A. Page 11.

THE RISING OF THE BEAST.

THE subjoined note I have received from one who concurs with my views.

"The origin of the beasts may furnish a key to their respective characters. Thus, the first beast, who is said to have risen out of the sea, is also said to have arisen from the bottomless pit, of which the sea may be a sort of type. As the bottomless pit is the abode of the prince of evil, this beast is essentially a child of the devil. Whether this beast be the Empire, or the Church, of Rome, or whatever other interpretation be put upon the figure, it seems certain that what this beast does, in its own character, is essentially evil: that is, it is essentially what the human conscience, if suffered to be heard, would condemn, either in the act or in the motive. But the second beast, which rises out of the earth, has neither a heavenly nor a hellish origin, whence we may conclude, that if it have no taste of heaven, it is equally without taint of hell. So far as good and evil are concerned, it seems to be a thing indifferent of itself. It is not good, but it may become so, just as it may pass from the state of indifference to the state of evil. Its

character must be determined by its acts. Now, by causing men to make an image to the first beast, whatever may be thereby meant, it shows that it will identify itself, or others, more or less with evil, by causing men to traffic with, countenance, or honour that which is alike opposed to the Divine will either as revealed supernaturally, or ascertained by the innate light of conscience."

B. Page 23.

THE TWO HORNS.

"Discourse on the Study of Natural Philosophy," Part I. chap. ii. By Sir I. F. W. Herschel.

"(13) Science is the knowledge of many, orderly and methodically digested and arranged, so as to become attainable by one. The knowledge of reasons and their conclusions constitutes *Abstract*, that of causes and their effects, and of the laws of nature, *Natural Science.*

"(14) Abstract Science is independent of a system of nature,—of a creation,—of every thing, in short, except memory, thought, and reason. Its objects are, first, those primary existences and relations which we cannot even conceive not to *be*, such as space, time, number, order, &c.; and, secondly, those artificial forms, or symbols, which thought has the power of creating for itself at pleasure, and substituting as representatives, by the aid of memory, for combinations of those primary objects and of its own conceptions,—either to facilitate the act of reasoning respecting them, or as convenient deposits of its own conclusions, or for their communication to others.

Such are, first, *language*, oral or written; its conventional forms, which constitute grammar, and the rules for its use in argument, in which consists the logic of the schools; secondly, *notation*, which, applied to *number*, is *arithmetic*,—and to the more general relations of abstract quantity or order, is *algebra;* and, thirdly, that higher kind of logic, which teaches us to use our reason in the most advantageous manner for the discovery of truth; which points out the criterions by which we may be sure we have attained it; and which, by detecting the sources of error, and exposing the haunts where fallacies are apt to lurk, at once warns us of their danger, and shows us how to avoid them. This greater logic may be termed *rational*[1]; while, to that inferior department which is conversant with words alone, the epithet *verbal*[2] may, for distinction, be applied."

Part II.—"Of the Principles on which Physical Science relies for its successful prosecution," &c. &c.

Chap. I.—"Of Experience as the source of our knowledge."

"(66) Into abstract science, as we have before observed, the notion of cause does not enter. The truths it is conversant with are *necessary* ones, and exist independent of cause. There may be no such real *thing* as a right-lined triangle marked out in space; but the moment we conceive one in our minds, we cannot refuse to admit the sum of its three angles to be equal to two right angles; and if in addition we conceive one of its angles to be a right angle, we cannot thenceforth refuse to admit that the sum of the squares on the two sides, including the right angle, is equal to the square on the side subtending it. To

[1] Λόγος, *ratio*, reason. [2] Λόγος, *verbum*, a word.

maintain the contrary, would be, in effect, to deny its being right angled. No one *causes* or *makes* all the diameters of an ellipse to be bisected in its centre. To assert the contrary, would not be to rebel against a power, but to deny our own words. But in Natural Science, *cause* and *effect* are the ultimate relations we contemplate; and *laws*, whether imposed or maintained, which, for aught we can perceive, might have been other than they are. This distinction is very important. A clever man, shut up alone and allowed unlimited time, might reason out for himself all the truths of mathematics, by proceeding from those simple notions of space and number of which he cannot divest himself without ceasing to think. But he could never tell, by any effort of reasoning, what would become of a lump of sugar if immersed in water, or what impression would be produced on his eye by mixing the colours yellow and blue.

"(67) We have thus pointed out to us as the great, and indeed only ultimate source of our knowledge of nature and its laws, Experience; by which we mean, not the experience of one man only, or of one generation, but the accumulated experience of all mankind in all ages, registered in books or recorded by tradition. But experience may be acquired in two ways; either, first, by noticing facts as they occur, without any attempt to influence the frequency of their occurrence, or to vary the circumstances under which they occur; this is Observation: or, secondly, by putting in action causes and agents over which we have control, and purposely varying their combinations, and noticing what effects take place; this is Experiment. To these two sources we must look as the fountains of all Natural Science. It is not intended, however, by thus distinguishing observation from experiment, to place them in any kind of contrast. Essentially they are much alike, and differ rather in degree than in kind; so that, perhaps, the terms *passive* and *active*

observation might better express their distinction; but it is, nevertheless, highly important to mark the different states of mind in inquiries carried on by their respective aids, as well as their different effects in promoting the progress of Science. In the former, we sit still and listen to a tale told us, perhaps obscurely, piecemeal, and at long intervals of time, with our attention more or less awake. It is only by after-rumination that we gather its full import; and often, when the opportunity is gone by, we have to regret that our attention was not more particularly directed to some point which, at the time, appeared of little moment, but of which we at length appreciate the importance. In the latter, on the other hand, we cross-examine our witness, and by comparing one part of his evidence with the other, while he is yet before us, and reasoning upon it in his presence, are enabled to put pointed and searching questions, the answer to which may at once enable us to make up our minds. Accordingly it has been found invariably, that in those departments of physics where the phenomena are beyond our control, or into which experimental inquiry, from other causes, has not been carried, the progress of knowledge has been slow, uncertain, and irregular; while in such as admit of experiment, and in which mankind have agreed to its adoption, it has been rapid, sure, and steady. For example, in our knowledge of the nature and causes of volcanoes, earthquakes, the fall of stones from the sky, the appearance of new stars and the disappearance of old ones, and other of those great phenomena of nature which are altogether beyond our command, and at the same time are of too rare occurrence to permit any one to repeat and rectify his impressions respecting them, we know little more now than in the earliest times. Here our tale is told us slowly, and in broken sentences. In astronomy, again, we have at least an uninterrupted narrative; the opportunity of observation is con-

stantly present, and makes up in some measure for the impossibility of varying our point of view, and calling for information at the precise moment it is wanted. Accordingly, astronomy, regarded as a science of mere observation, arrived, though by very slow degrees, to a state of considerable maturity. But the moment that it became a branch of mechanics, a science essentially experimental (that is to say, one in which any principle laid down can be subjected to immediate and decisive *trial*, and where experience does not require to be waited for), its progress suddenly acquired a tenfold acceleration; nay, to such a degree, that it has been asserted, and we believe with truth, that were the records of all observations from the earliest ages annihilated, leaving only those made in a single observatory [3], during a single lifetime [4], the whole of this most perfect of Sciences might, from those data, and as to the objects included in them, be at once reconstructed, and appear precisely as it stood at their conclusion."

Two points of resemblance between the horns of the beast and those of the lamb (according to my view of both) may be noticed here. So strong are the horns of the lamb, i. e. so great is his power, that all things are put in subjection under his feet. So strong are the horns of the beast, i. e. so great is the power of Science, that Sir John Herschel speaks of reason (that horn which answers to the Divine Word) having enabled us to subdue all nature to our purposes [5]. So great is the power of the lamb, that he could with truth tell men that if they destroyed the temple of his body, he would raise it up in three days. So strong are the horns of the beast, i. e. so great is the power of modern Physical Science, that if the accumulated knowledge of ages in astronomy (the most

[3] Greenwich. [4] Maskelyne's.
[5] "Discourse," &c., Part I. chap iii. (65).

perfect of Sciences) were lost, we have reason to believe, the work recently carried on in a single observatory during a single lifetime, would be enough to restore it. Destroy the beast's body, and in a few days he will raise it up. Are we ever likely to see a closer resemblance to the power of the Lamb?

Compare with this the resemblance between the Lamb and the beast in, their both coming from the earth (see chap. ii.); though the Lamb, as the Lord from heaven, first descended into it, and the beast as coming from man, was altogether of earthy origin.

Again; the extract given above shows that astronomy—the Science which seems at first sight least of all to come from the *earth*—does so really as much as any other. For it was not till it became a branch of *mechanics* that it began to make rapid strides; and when its connexion with the *earth* was once understood, we became independent of the observations of previous ages.

C. Page 32.

EXTENT OF OUR KNOWLEDGE.

"Discourse on the Study of Natural Philosophy," Part II. chap. ii.

"(77) How far we may ever be enabled to attain a knowledge of the ultimate and inward processes of nature in the production of phenomena, we have no means of knowing; but, to judge from the degree of obscurity which hangs about the only case in which we feel within ourselves a *direct* power to produce any one, there seems no great hope of penetrating so far. The case alluded to is the production of motion by the exertion of force. We are conscious of a power to move our limbs, and by their intervention other

bodies; and that this effect is the result of a certain inexplicable process which we are aware of, but can no way describe in words, by which we exert *force*. And even when such exertion produces no visible effect (as when we press our two hands violently together, so as just to oppose each other's effort), we still perceive, by the fatigue and exhaustion, and by the impossibility of maintaining the effort long, that something is going on within us, of which the mind is the agent, and the will the determining cause. This impression which we receive of the nature of force, from our own effort and our sense of fatigue, is quite different from that which we obtain of it from seeing the effect of force exerted by others in producing *motion*. Were there no such thing as motion, had we been from infancy shut up in a dark dungeon, and every limb encrusted with plaster, this internal consciousness would give us a complete idea of *force;* but when set at liberty, habit alone would enable us to recognize its exertion by its *signal*, motion, and *that* only by finding that the same action of the mind which in our confined state enables us to fatigue and exhaust ourselves by the tension of our muscles, puts it in our power, when at liberty, to move ourselves and other bodies. But how obscure is our knowledge of the process going on within us in the exercise of this important privilege, in virtue of which alone we act as direct *causes*, we may judge from this, that when we put any limb in motion, the seat of the exertion seems to us to be *in* the limb, whereas it is demonstrably no such thing, but either in the brain or in the spinal marrow; the proof of which is, that if a little fibre, called a nerve, which forms a communication between the limb and the brain, or spine, be divided in any part of its course, however we may make the effort, the limb will not move.

(78) This one instance of the obscurity which hangs about the only act of direct *causation* of which we

have an immediate consciousness, will suffice to show how little prospect there is that, in our investigation of nature, we shall ever be able to arrive at a knowledge of ultimate causes, and will teach us to limit our views to that of *laws*, and to the analysis of complex phenomena by which they are resolved into simpler ones, which, appearing to us incapable of further analysis, we must consent to regard as causes. Nor let any one complain of this as a limitation of his faculties. We have here 'ample room and verge enough' for the full exercise of all the powers we possess; and, besides, it does so happen, that we are actually able to trace up a very large portion of the phenomena of the universe to this one *cause*, viz. the exertion of mechanical *force;* indeed, so large a portion, that it has been made a matter of speculation whether this is not the only one that is capable of acting on material beings."

Part III. Chap. vi.

"(391) Finally, when we look back on what has been accomplished in science, and compare it with what remains to be done, it is hardly possible to avoid being strongly impressed with the idea that we have been, and are still, executing the labour by which succeeding generations are to profit. In a few instances only have we arrived at those general axiomatic laws which admit of direct deductive inference, and place the solutions of physical phenomena before us as so many problems, whose principles of solution we fully possess, and which require nothing but acuteness of reasoning to pursue even into their farthest recesses In fewer still have we reached that command of abstract reasoning itself which is necessary for the accomplishment of so arduous a task. Science, therefore, in relation to our faculties, still remains bound-

less and unexplored; and, after the lapse of a century and a half from the era of Newton's discoveries, during which every department of it has been cultivated with a zeal and energy which have assuredly met their full return, we remain in the situation in which he figured himself,—standing on the shore of a wide ocean, from whose beach we may have culled some of those innumerable beautiful productions it casts up with lavish prodigality, but whose acquisition can be regarded as no diminution of the treasures that remain."

D. Page 36.

FRANKLIN'S GREAT WONDER AND ITS EFFECT.

A writer in the *Cornhill Magazine* of 1860 (vol. ii. p. 62), on "Electricity and the Electric Telegraph," thus shows the importance of a successful experiment. "During several years Franklin had observed the many points of resemblance which subsist between lightning and electricity; but it was only in 1752 that he succeeded in demonstrating their identity. His preconceived opinions on this subject, transmitted in a series of letters to London, were received with roars of laughter by the members of the Royal Society!

"The names of a few members of the Royal Society of that age still retain a comparatively obscure place in the scientific annals of their country, but the self-taught philosopher of Philadelphia holds a niche in the Temple of Fame, second only to that of Newton."

E. Page 43.

ELECTRICITY.

"Discourse on the Study of Natural Philosophy," Part III. chap. v.

"(368) To electricity the views of the physical inquirer now turn from almost every quarter, as to one of those universal powers which Nature seems to employ in her most important and secret operations. This wonderful agent, which we see in intense activity in lightning, and in a feebler and more diffused form traversing the upper regions of the atmosphere in the northern lights, is present, probably in immense abundance, in every form of matter which surrounds us, but becomes sensible only when disturbed by excitements of peculiar kinds. The most effectual of these is friction, which we have already observed to be a powerful source of heat. Everybody is familiar with the crackling sparks which fly from a cat's back when stroked. These, by proper management, may be accumulated in bodies suitably disposed to receive them, and, although then no longer visible, give evidence of their existence by the exhibition of a vast variety of extraordinary phenomena,—producing attractions and repulsions in bodies at a distance,—admitting of being transferred by contact, or by sudden and violent transilience of the interval of separation, from one body to another, under the form of sparks and flashes;—traversing with perfect facility the substance of the densest metals, and a variety of other bodies called conductors, but being detained by others, such as glass, and especially *air*, which are thence called non-conductors,—producing painful shocks and convulsive motions, and even death itself if in sufficient quantity, in animals through which they pass, and

finally imitating, on a small scale, all the effects of lightning."

* * * * * *

"(378) Among the remarkable effects of electricity disclosed by the researches of Galvani and Volta, perhaps the most so consisted in its influence on the nervous system of animals. The origin of muscular motion is one of those profound mysteries of nature which we can scarcely venture to hope will ever be fully explained. Physiologists, however, had long entertained a general conception of the conveyance of some subtle fluid or spirit from the brain to the muscles of animals along the nerves; and the discovery of the rapid transmission of electricity along conductors, with the violent effects produced by shocks, transmitted through the body, on the nervous system, would very naturally lead to the idea that this nervous fluid, if it had any real existence, might be no other than the electrical. But until the discoveries of Galvani and Volta, this could only be looked upon as a vague conjecture. The character of a *vera causa* was wanting to give it any degree of rational plausibility, since no reason could be imagined for the disturbance of the electrical equilibrium in the animal frame, composed as it is entirely of conductors, or rather, it seemed contrary to the then known laws of electrical communication to suppose any such. Yet one strange and surprising phenomenon might be adduced indicative of the possibility of such disturbance, viz. the powerful shock given by the torpedo and other fishes of the same kind, which presented so many analogies with those arising from electricity, that they could hardly be referred to a different source, though *besides* the shock neither spark nor any other indication of electrical tension could be detected in them.

"(379) The benumbing effect of the torpedo had been ascertained to depend on certain singularly con-

structed organs, composed of membranous columns, filled from end to end with laminæ, separated from each other by a fluid: but of its mode of action no satisfactory account could be given; nor was there any thing in its construction, and still less in the nature of its materials, to give the least ground for supposing it an electrical apparatus. But the pile of Volta supplied at once the analogies both of structure and of effect, so as to leave little doubt of the electrical nature of the apparatus, or of the power, a most wonderful one certainly, of the animal, to determine, by an effort of its will, that concurrence of conditions on which its activity depends. This remained, as it probably ever will remain, mysterious and inexplicable; but the principle once established, that there exists in the animal economy a power of determining the development of electrical excitement, capable of being transmitted along the nerves, and it being ascertained by numerous and decisive experiments, that the transmission of Voltaic electricity along the nerves of even a dead animal is sufficient to produce the most violent muscular action, it became an easy step to refer the origin of muscular motion in the living frame to a similar cause; and to look to the brain, a wonderfully constituted organ, for which no mode of action possessing the least plausibility had ever been devised, as the source of the required electrical power[6]."

[6] "If the brain be an electric pile, constantly in action, it may be conceived to discharge itself at regular intervals, when the tension of the electricity developed reaches a certain point, along the nerves which communicate with the heart, and thus to excite the pulsations of that organ. This idea is forcibly suggested by a view of that elegant apparatus, the dry pile of Deluc; in which the successive accumulations of electricity are carried off by a suspended ball, which is kept by the discharges in a state of regular pulsation for any length of time. We have witnessed the action of such a pile maintained in this way for whole years in the study of the above-named eminent philosopher. The same idea of the cause of the pulsation of the heart appears to have occurred to Dr.

I am aware that our knowledge of the subject is greater now than when Sir John Herschel wrote this, but I have been anxious to keep my quotations on scientific matters, as much as possible from one book, and that book an authority; and whatever alterations in opinion more recent discoveries may have caused, the main idea I wished to bring forward (the connexion of electricity with life)is only, if possible, more firmly established.

It would seem strange, however, in any account of electricity, to pass entirely over that greatest wonder of our own day, the electric telegraph. I shall therefore close this note with an extract from the article in the Cornhill Magazine on "Electricity and the Electric Telegraph" already quoted in note D.

"Cornhill Magazine." Vol. ii. p. 73.

"It is unnecessary to enter into any details as to the manifold purposes to which the electric telegraph is now applied. Already it has become an indispensable agent of civilized society—materially influencing the political, social, and commercial relations of every country in Europe. And from whatever point of view we regard it, we cannot but feel convinced that Science, in this her most brilliant achievement, has placed in our hands an instrument which adds another link to that chain of causes which is slowly, silently, and imperceptibly bridging over the chasms which separate nation from nation, and race from race; and whose influence on the future of civilization it is impossible to estimate. Its frail tendrils have not only penetrated into every corner of Europe—into remote lands, whose religious systems and social institutions exist now, as they existed at a time when

Arnott; and is mentioned in his useful and excellent work on physics, to which, however, we are not indebted for the suggestion, it having occurred to us independently many years ago."

our ancestors were mere barbarians; but it conveys its own significant lesson to the Indian in his wigwam, to the Hottentot in his kraal, and to the Arab in the desert.

"In conclusion: What is electricity? Science has hitherto failed to answer the question satisfactorily. Some hold that it is a *state* or *condition of matter;* others, that it is an independent substance, an impalpable, imponderable, and highly elastic fluid. The nomenclature of the Science is therefore grounded, in some measure, on hypothesis. *Fluid, current, positive, negative,* are simply the convenient terms of convenient theories. We talk of electricity 'traversing a wire;' but an opinion has long been gaining ground that it merely influences the molecular arrangement of the conductor; that, instead of propagating itself by a series of pulsations, it simply causes every component particle to assume certain electrical conditions. We talk of 'positive' and 'negative,' as if there were two distinct currents, one of which is more powerful than the other; whilst in reality this dual force is co-existent, co-active, and mutually dependent, just as if there were only one which, under certain conditions, is capable of producing diametrically opposite results. This uncertainty is by no means confined to electrical Science. We produce light and heat; we throw a stone into the air with an absolute conviction that it will fall to the ground. There are laws of light and of heat, and there is a law of gravitation. But a law implies something—a force, an agency; and what are those forces or agencies? We talk proudly of 'man's dominion over nature,' of 'scanning the heavens,' of 'taming the lightning,' but we can see little beyond the shows of things. The shadow is there, but the substance eludes our grasp. Like the physiognomist, we may indeed decipher something of Nature from the aspect of her countenance, but we cannot see the workings of her inmost

heart. The greatest philosopher among us is still, as in the days of Newton, like a child standing on the sea-shore. The illimitable ocean lies outstretched before him. Now and then she casts a pearl at his feet. But her richest treasures lie far down in those unfathomable depths which mortal hand can never reach, and mortal eye can never pierce."

F. Page 46.

THE VALUE OF WONDERS.

"Discourse on the Study of Natural Philosophy." Part I. chap. ii.

". . . . To one incapable of following out the intricacies of mathematical demonstration, the conviction afforded by verified predictions must stand in the place of that purer and more satisfactory reliance, which a verification of every step in the process of reasoning can alone afford, since every one will acknowledge the validity of pretensions which he in the daily habit of seeing brought to the test of practice.

"(21) Among the verifications of this practical kind which abound in every department of physics, there are none more imposing than the precise prediction of the greater phenomena of astronomy; none, certainly, which carry a broader conviction home to every mind from their notoriety and unequivocal character. The prediction of eclipses has accordingly, from the earliest ages, excited the admiration of mankind, and been one grand instrument by which their allegiance (so to speak) to natural science, and their respect for its professors, has been maintained; and though strangely abused in unenlightened ages by the supernatural pretensions of astrologers, the credence given

even to their absurdities, shows the force of this kind of evidence on men's minds. The predictions of astronomers are, however, now far too familiar to endanger the just equipoise of our judgment, since even the return of comets, true to their paths and exact to the hour of their appointment, has ceased to amaze, though it must ever delight all who have souls capable of being penetrated by such beautiful instances of accordance between theory and facts. But the age of mere wonder in such things is past, and men prefer being guided and enlightened, to being astonished and dazzled. Eclipses, comets, and the like, afford but rare and transient displays of the powers of calculation, and of the certainty of the principles on which it is grounded. A page of 'lunar distances' from the Nautical Almanack is worth all the eclipses that have ever happened for inspiring this necessary confidence in the conclusions of Science. That a man, by merely measuring the moon's apparent distance from a star with a little portable instrument held in his hand, and applied to his eye, even with so unstable a footing as the deck of a ship, shall say positively, within five miles, where he is, on a boundless ocean, cannot but appear to persons ignorant of physical astronomy an approach to the miraculous. Yet, the alternatives of life and death, wealth and ruin, are daily and hourly staked with perfect confidence on these marvellous computations, which might almost seem to have been devised on purpose to show how closely the extremes of speculative refinement and practical utility can be brought to approximate. We have before us an anecdote communicated to us by a naval officer[7], distinguished for the extent and variety of his attainments, which shows how impressive such results may become in practice. He sailed from San Blas on

[7] Captain Basil Hall, R.N.

the west coast of Mexico, and after a voyage of 8000 miles, occupying eighty-nine days, arrived off Rio de Janeiro, having in this interval passed through the Pacific Ocean, rounded Cape Horn, and crossed the South Atlantic, without making any land, or even seeing a single sail, with the exception of an American whaler off Cape Horn. Arrived within a week's sail of Rio, he set seriously about determining, by lunar observations, the precise line of the ship's course and its situation in it at a determinate moment, and having ascertained this within from five to ten miles, ran the rest of the way by those more ready and compendious methods, known to navigators, which can be safely employed for short trips between one known point and another, but which cannot be trusted in long voyages, where the moon is the only sure guide. The rest of the tale we are enabled by his kindness to state in his own words:—'We steered towards Rio de Janeiro for some days after taking the lunars above described, and having arrived within fifteen or twenty miles of the coast, I hove to at four in the morning till the day should break, and then bore up; for although it was very hazy, we could see before us a couple of miles or so. About eight o'clock it became so foggy that I did not like to stand in farther, and was just bringing the ship to the wind again before sending the people to breakfast, when it suddenly cleared off, and I had the satisfaction of seeing the great Sugar-loaf Rock, which stands on one side of the harbour's mouth, so nearly right ahead that we had not to alter our course above a point in order to hit the entrance of Rio. This was the first land we had seen for three months, after crossing so many seas and being set backwards and forwards by innumerable currents and foul winds.' The effect on all on board might well be conceived to have been electric; and it is needless to remark how essentially the authority of a commanding officer over his crew

may be strengthened by the occurrence of such incidents, indicative of a degree of knowledge and consequent power beyond their reach."

"He doeth great wonders."—Now, compared with such great wonders as these, what are the paltry sham miracles of the Church of Rome? bleeding wafers, liquefying blood, and winking statues, &c. &c. Yet Rome has been called "the masterpiece of Satan;" but surely deception by means of knowledge is more of a masterpiece than deception by ignorance? and if all apostasy be found in Rome, what place in the opposition of the world to Christ, does the scientific opposition which has followed her's take? There seems to be the same sort of difference between the two kinds that there is between the tricks of a conjuror in a darkened room with a complicated apparatus, and the tricks of one who in full light deceives you by pure sleight of hand. For Rome's authority was not obtained "by the means of those *miracles*" she "had (*not*) power to do," but by the means of that *ignorance* she *had* power to enforce.

G. Page 47.

SCIENCE AND REVEALED RELIGION.

"Discourse on the Study of Natural Philosophy." Part I. chap. i.

"(5) Nothing, then, can be more unfounded than the objection which has been taken *in limine*, by persons, well meaning perhaps, certainly narrow-minded, against the study of natural philosophy, and indeed against all Science,—that it fosters in its cultivators an undue and overweening self-conceit, leads them to doubt the immortality of the soul, and

to scoff at revealed religion. Its natural effect, we may confidently assert, on every well-constituted mind is, and must be, the direct contrary. No doubt the testimony of natural reason, on whatever exercised, must of necessity stop short of those truths which it is the object of revelation to make known; but, while it places the existence and principal attributes of a Deity on such grounds as to render doubt absurd, and atheism ridiculous, it unquestionably opposes no natural or necessary obstacle to further progress: on the contrary, by cherishing as a vital principle an unbounded spirit of inquiry, and ardency of expectation, it unfetters the mind from prejudices of every kind, and leaves it open and free to every impression of a higher nature which it is susceptible of receiving, guarding only against enthusiasm and self-deception by a habit of strict investigation, but encouraging, rather than suppressing, every thing that can offer a prospect or a hope beyond the present obscure and unsatisfactory state. The character of the true philosopher is to hope all things not impossible, and to believe all things not unreasonable. He who has seen obscurities which appeared impenetrable in physical and mathematical science suddenly dispelled, and the most barren and unpromising fields of inquiry converted, as if by inspiration, into rich and inexhaustible springs of knowledge and power on a simple change of our point of view, or by merely bringing to bear on them some principle which it never occurred before to try, will surely be the very last to acquiesce in any dispiriting prospects of either the present or future destinies of mankind; while, on the other hand, the boundless views of intellectual and moral as well as material relations which open on him on all hands in the course of these pursuits, the knowledge of the trivial place he occupies in the scale of creation, and the sense continually pressed upon him of his own weakness and incapacity to suspend or

modify the slightest movement of the vast machinery he sees in action around him, must effectually convince him that humility of pretension, no less than confidence of hope, is what best becomes his character."

II. Page 68.

POLITICAL ECONOMY.

I HAVE never seen the objects of Political Economy more simply and clearly stated than in the translation by D. Boileau, (published in this country in 1812,) of a work by a French writer, Charles Ganilh (Advocate). A few extracts from the introduction to the book may be satisfactory to some readers.

"An Inquiry into the Various Systems of Political Economy."

("Plan of the Work.")

"Ever since modern countries have reached a degree of opulence unknown to the nations of antiquity and the middle ages, and particularly since wealth has been discovered to be altogether the basis and measure of the relative and absolute power of states; the sources whence wealth is produced, the measures which accelerate its growth, the laws by which it is distributed and circulated, and the means of regulating its employment, increasing its abundance, and insuring its constant progress, have frequently been investigated.

"This subject, known at present by the name of Political Economy, (no doubt, because it embraces

individual efforts and national regulations, and blends them in one point of view,) has been amply discussed in all its bearings and applications. Several works published in England, Italy, and France, mostly of great merit, and all of them more or less useful, have thrown considerable light upon this department of human knowledge; and, by disclosing its importance, have at length placed Political Economy in the first rank of political sciences."

* * * * *

"Introduction."

"On the Nature of Wealth."

"Political sciences afford few subjects of meditation more extensive, more complicated, more instructive, and more productive of important consequences, than the problem of the moral and political advantages and inconveniences of wealth; a subject which has been so frequently discussed, and so variously resolved in every treatise on morals and politics.

"When we consider how little, in this respect, men have been anxious to make their opinions agree with their practice, their principles with their conduct, and their morality with their actions; the solution of the problem becomes still more difficult: men appear to have prescribed duties for themselves merely for the purpose of transgressing them, or, at least, to have imagined that to transgress them was allowable as often as it might prove useful. Let it not be supposed, however, that this inconsistency is peculiar to some individuals, some classes, or corporations, certain times, and certain countries: it is common to all men, to all nations, and all times. Though despised by the wise, *condemned by religious tenets*[8], accused by moralists

[8] The Italics are my own.

and publicists of the perversity of individuals, the depravity of manners, the decline of nations, and the fall of empires, wealth is yet every where the object of the ambition of individuals and nations; the cause of their quarrels and contentions, and but too often the reward of violence, of fraud, and injustice, and of the infraction of all laws human and divine. Every where poverty, though praised, commended, and ranked among the virtues most honourable to humanity, is regarded as a misfortune, sometimes as a disgrace, and almost always as a symptom of vice, or of an inferiority of either physical or intellectual faculties.

"To reconcile this singular contradiction, to develope it causes, and decide between the passions and the instructors of mankind, is certainly no easy task. It ought, however, to be less difficult, now that political economy indicates pure and salutary sources of wealth, the abundance of which may be increased by means conformable to reason, justice, and morality: equally beneficial to the rich and poor, and as lawful as honourable in their application. Yet, by a strange fatality, this precious discovery has not cured public opinion of its prejudice against riches: and to write in behalf of wealth, is still as rash, as it is rare to see poverty honoured in a drawing-room.

"If Political Economy has hitherto been unable to make men relinquish their erroneous notions concerning wealth, or to convince them of its being morally and politically beneficial, it is to be feared that the same fatal prejudice will be extended to the theory of wealth, and that mankind will not feel greatly disposed to patronize a science, the object of which is little valued. There is, at least, no hope that it will be diligently studied, successfully cultivated, and eagerly diffused among the enlightened classes of the community, on whose patronage alone the progress of Science depends, and without whose co-operation the

solitary efforts of a few courageous partisans, who have to struggle against the torrent of general indifference, must always prove unavailing.

"It is, therefore, of the utmost importance for the success of Political Economy, that the mysterious vail, which has hitherto concealed the true nature of wealth, should be removed. The origin of a prejudice so ancient against riches, and the source of the charms which wealth, in despite of this prejudice, constantly possesses in the eyes of individuals and nations, must be investigated. It must be known whether the disastrous effects of which wealth is accused, spring from its nature or from extraneous causes. It must, in fine, be ascertained whether wealth has been the parent of more virtues than vices, whether it deteriorates more than it improves the condition of nations, and whether it has been more prejudicial to the duration and safety of empires, than favourable to their elevation and grandeur."

* * * * *

I. Page 85.

ANTICHRIST.

If the argument in this chapter on "the number of a man" be sound, will it not apply with the same force to "the man of sin?" who in that case might mean man in his most sinful state, the Christian unchristianized, the salt having lost its savour.

The man of sin is to be "*revealed*," and something that "letteth" must first be taken out of the way. This has been considered to be the Roman Empire, and secular law. The Roman Empire being taken away, the Pope obtained the Emperor's power, and

was looked upon as the man of sin. He answered sufficiently to the description for those who were ignorant of the changes to come to fight against him with that belief, and thus he might be a sort of first, or typical, fulfilment of the prophecy. But as he wielded the Emperor's power he might himself, so far, be that which prevented the revealing of the true man of sin. Now at the Reformation his power was broken, and has since wasted considerably, though it is not yet destroyed. But the persecuting power of the Popes had prevented the appearance and spread of any doctrines which were opposed to the pretensions of Rome, save and except those doctrines for which men were content to die; believing that death for them was better than life without them. Thus perhaps he that letteth is still being taken away, and as liberty increases the man of sin may be gradually revealed. For I can hardly think such a way of speaking would apply to one man picked out of a single generation and destroyed by the coming of Christ during his own lifetime. Mohammed was a false prophet and carried many with him, but had his religion been summarily cut off with himself, surely it would not have had time to become the formidable enemy to truth and to men that it did become. So perhaps the man of sin may be that last development of humanity without God "whose coming is after the working of Satan with all power and signs and lying wonders. And with all deceivableness of unrighteousness in them that perish." And he may now be rapidly growing in the sunshine of modern liberty. By this I do not in the least mean to attack modern liberty, for it must needs be that offences come; and if good things are abused the woe is—not to the good things, but to those who abuse them.

If there be any truth in this theory it may perhaps account for the difficulty there is to find in prophecies stretching to the end of the world (as the Revelation

of St. John) any one person answering to the man of sin of St. Paul, and the antichrist of St. John's Epistles. But I merely mention it as a speculation, knowing what a host of learned men take the opposite view, of an individual antichrist[7]

Z. Page 90.

RATIONALISM, AND THE RELATION IN WHICH IT STANDS TO ANTICHRIST. AN EXAMINATION OF A RATIONALISTIC DIFFICULTY.

If the infidel antichrist be still to come, in what relation does Rationalism stand to him? It may perhaps be compared to a serpent's egg from which in time will come forth even that seed of the serpent. For it begins by casting off the books of Moses, and Christ Himself said, "If ye believe not his writings, how shall ye believe my words[1]?"

"If they hear not Moses and the prophets, neither will they be persuaded though one rose from the dead[2]."

Now, at the very opening of the Bible the Rationalist finds a difficulty. Two accounts of the creation; two names of God; a doubleness, which, he says, arises from the union of two distinct ideas, from different sources, and of different dates, and which he looks upon therefore as a proof of the merely human origin, and consequently of the imperfection, of the whole book.

This is a question which appears to depend a great deal upon the meaning of Hebrew words, so that

[7] See Smith's Dictionary of the Bible, article "Antichrist."
[1] John v. 47. [2] Luke xvi. 31.

readers of a translation feel themselves to be merely lookers on at a battle of scholars. Yet an explanation of the difficulty may be found even in a translation of the Bible, and I shall therefore venture to point it out, since I am not aware that it has in this form been brought forward. Without, then, feeling at all dissatisfied with the usual answer to the Rationalist on this subject, viz. that "Within the Canon, the use of the names of God is every where determined by their inherent difference of signification,"—I think that the following view is not excluded by such an answer.

The first chapter of Genesis gives a general account of the whole work of creation, and describes it as lasting six days. In this account the creation of man is spoken of generally—"Male and female created he them," and all through the chapter the name of God that is used is this name,—God.

But there is a peculiarity that if we were not so used to it would perhaps be more striking than it now is, the expression "And God said," which is put before each day's work. This shows Him creating by His word. But had He merely *said*, without putting forth His Almighty power, surely there would have been no creation.

In the second chapter, though there is not so complete a general account, the description of the creation of man is very much more full; in fact, the history of man really begins in this chapter. Now, however, there is no longer the expression "And God *said*," but a new name is introduced, and the "Lord God" —*did*.

Now the Lord is the incommunicable name of God, and the Lord is the name of Christ, and Christ is the Word; "the wisdom and the power of God." Does not this doubleness, then, show the creation of the world by the *living* Word? of whom it is thus written in the New Testament,—

"(1) In the beginning was the Word, and the Word was with God, and the Word was God.

"(2) The same was in the beginning with God.

"(3) All things were made by him; and without him was not any thing made that was made.

"(4) In him was life; and the life was the light of men.

"(5) And the light shineth in darkness; and the darkness comprehended it not[3]."

And again:

"(1) God, who at sundry times and in divers manners spake in time past unto the fathers by the prophets,

"(2) Hath in these last days spoken unto us by his Son, whom he hath appointed heir of all things, by whom also he made the worlds;—"

* * * * * *

"(6) And again, when he bringeth in the first-begotten into the world, he saith, And let all the angels of God worship him.

"(7) And of the angels he saith, Who maketh his angels spirits, and his ministers a flame of fire.

"(8) But unto the Son he saith, Thy throne, O God, is for ever and ever: a sceptre of righteousness is the sceptre of thy kingdom.

"(9) Thou hast loved righteousness, and hated iniquity; therefore God, even thy God, hath anointed thee with the oil of gladness above thy fellows.

"(10) And, Thou, Lord, in the beginning hast laid the foundation of the earth; and the heavens are the works of thine hands:

"(11) They shall perish; but thou remainest; and they shall wax old as doth a garment;

"(12) And as a vesture shalt thou fold them up, and they shall be changed: but thou art the same, and thy years shall not fail[4]."

[3] John i. 1—5. [4] Heb. i. 1, 2; 6—12.

That God should be spoken of by more names than one seems to cause trouble to the Rationalist; but if there be a Trinity in Unity in the Godhead, there can be nothing strange in it. And why must it be absolutely necessary to look to different sources for two names if one name be not sufficient to express all that it is necessary for us to know about God? Our Lord Himself used this double way of speaking in such a striking manner that it would seem to have been *impossible* for him to convey his meaning to his disciples without using it. For example:

"(7) If ye had known me, ye should have known my Father also: and from henceforth ye know him, and have seen him.

"(8) Philip saith unto him, Lord, show us the Father, and it sufficeth us.

"(9) Jesus saith unto him, Have I been so long time with you, and yet hast thou not known me, Philip? he that hath seen me hath seen the Father; and how sayest thou then, Show us the Father?

"(10) Believest thou not that I am in the Father, and the Father in me? the words that I speak unto you I speak not of myself; but the Father that dwelleth in me, he doeth the works.

"(11) Believe me that I am in the Father, and the Father in me: or else believe me for the very works' sake[5]."

And again:

"(15) If ye love me, keep my commandments.

"(16) And I will pray the Father, and he shall give you another Comforter, that he may abide with you for ever;

"(17) Even the Spirit of truth; whom the world cannot receive, because it seeth him not, neither knoweth him: but ye know him; For he dwelleth with you, and shall be in you.

[5] John xiv. 7—11; 15—18.

"(18) I will not leave you comfortless: I will come to you."

It would be difficult for even the Rationalist to find two distinct sources for these two ideas.

Again: "hear what the Spirit saith unto the churches."

"Him that overcometh will I make a pillar in the temple of my God, and he shall go no more out: and I will write upon him the name of my God, and the name of the city of my God, which is new Jerusalem, which cometh down out of heaven from my God: and I will write upon him my new name [6]."

Of the Word, St. John in his Gospel, says,

"In him was life; and the life was the light of men. . . . ."

"(9) That was the true Light, which lighteth every man that cometh into the world [7]."

Of the Lord God, Moses says, that He "formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul [8]."

And Christ, after his resurrection, breathed on his disciples and said, "Receive ye the Holy Ghost [9]."

It must be remembered that it was not enough to represent the creation of the world by the Word as a Person alone; mere doubleness was evidently not intended to be shown. On the contrary, it is the Unity that is most plainly set forth. That Unity, however, which was expressed in doubleness by our Lord Himself when he said, "I and my Father are one [1]."

But, as at another time He named the Trinity, when He commanded His disciples to teach all nations, "baptizing them in the name of the Father, and of the Son, and of the Holy Ghost [2]:"—so there

[6] Rev. iii. 12. [7] John. i. 4. 9. [8] Gen. ii. 7.
[9] John. xx. 22. [1] John x. 30. [2] Matt. xxviii. 19.

is in truth, in the history of the creation at the beginning of the Bible, a sign, not of Two, but of Three. For "the Spirit of God moved upon the face of the waters[3]." And in the expression Spirit of God, there is implied a doubleness of the same kind as that implied in the name Word of God; and again, as that implied in the name the Father. And as there is this indication of a Trinity, so from the way in which it is set forth, all bears witness to the Unity; for no one, I believe, has for a moment denied that the Unity of the Godhead is the great leading idea in the opening of Genesis.

In the midst of the third chapter, the double name, the Lord God, being still used, we find the account of the temptation and the fall. Here the name LORD is not used either by the serpent, or by Eve when she answers him. Immediately after the fall the double name is again introduced, and used every time that God is mentioned till man is driven out of paradise. This can hardly be accident. Is it fanciful to see in St. John's definition of antichrist some explanation of it? "Who is a liar but he that denieth that Jesus is the Christ? He is antichrist, that denieth the Father and the Son." For the serpent we know "is a liar, and the father of it[4]."

The fourth chapter of Genesis begins with the birth of Cain, when Eve said, "I have gotten a man from the Lord."

Then follows the history of Cain and Abel.

Cain offered of the fruits of the ground to the Lord; thus, it seems, worshipping a revealed God, but as Creator, or Giver of life, only. Abel offered "of the firstlings of his flock and of the fat thereof;" thus, it seems, by sacrifice recognizing both fall and redemption; for "by faith Abel offered unto God a

[3] Gen. i. 2.

[4] John viii. 44.

more excellent sacrifice than Cain[5];"—"And the Lord had respect unto Abel and to his offering:

"But unto Cain and to his offering he had not respect[3]."

("Whosoever denieth the Son, the same hath not the Father[6].")

And now, as if to show at once and for ever the true value of what may be called natural religion, i. e. the worshipping God as Creator only; "Cain rose up against Abel his brother, and slew him."

Thus I look upon Cain as a representative of natural religion though he worshipped a revealed God; since I cannot see how natural religion pure and simple can exist on the earth; at any rate how it can be proved to exist. For since all men come from Adam, who knew God from the first, there has been no time in the whole history of the world when men have had by searching to find out God. And however much true ideas may have become corrupted, it will, I think, be almost impossible to say of any people that tradition of the truth had no influence whatever upon their ideas, and no power in giving one direction rather than another to them. We need not, however, in tracing religious traditions go so far back as Adam, since the world had a second start at the flood, and Noah knew the Lord.

Now, is not the modern Rationalist in the very same position as the heathen—getting all the best of his ideas from revelation without knowing it, or rather, in his case, without acknowledging it? And may not the very savages rise up in judgment with this generation and condemn it? For they go to God with blood, their own often, but with blood; while these men, with a strange confidence, actually got from the very revelation they reject, go to him

[5] Heb. xi. 4. [6] 1 John ii. 23.

with nothing at all! They are generally very ready to say "God is love," but how do they know that? Certainly not from nature, else why have not the heathen found it out? Neither from Science, for the idea is older than Science.

According to this view of the opening of the Bible, then, we see our Lord and Saviour Jesus Christ revealed as Alpha and Omega, the beginning, as well as the ending, the first as well as the last, "which is, and which was, and which is to come, the Almighty."

THE END.

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